



SEQUENCE LISTING

<110> Ruvkun, Gary  
Ogg, Scott

<120> THERAPEUTIC AND DIAGNOSTIC TOOLS FOR  
IMPAIRED GLUCOSE TOLERANCE CONDITIONS

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Ser	Ala	Leu	Ala	Leu	Asp	Asn	Ser	Tyr	Val	Ile	Arg	Asn	Leu	Lys	His	900	905	910	
Tyr	Thr	Leu	Tyr	Ala	Ile	Ser	Leu	Ser	Ala	Cys	Gln	Asn	Met	Thr	Val	915	920	925	
Pro	Gly	Ala	Ser	Cys	Ser	Ile	Ser	His	Arg	Ala	Gly	Ala	Leu	Lys	Arg	930	935	940	
Thr	Lys	His	Ile	Thr	Asp	Ile	Asp	Lys	Val	Leu	Asn	Glu	Thr	Ile	Glu	945	950	955	960
Trp	Arg	Phe	Met	Asn	Asn	Ser	Gln	Gln	Val	Asn	Val	Thr	Trp	Asp	Pro	965	970	975	
Pro	Thr	Glu	Val	Asn	Gly	Gly	Ile	Phe	Gly	Tyr	Val	Val	Lys	Leu	Lys	980	985	990	
Ser	Lys	Val	Asp	Gly	Ser	Ile	Val	Met	Thr	Arg	Cys	Val	Gly	Ala	Lys	995	1000	1005	
Arg	Gly	Tyr	Ser	Thr	Arg	Asn	Gln	Gly	Val	Leu	Phe	Gln	Asn	Leu	Ala	1010	1015	1020	
Asp	Gly	Arg	Tyr	Phe	Val	Ser	Val	Thr	Ala	Thr	Ser	Val	His	Gly	Ala	1025	1030	1035	104
Gly	Pro	Glu	Ala	Glu	Ser	Ser	Asp	Pro	Ile	Val	Val	Met	Thr	Pro	Gly	1045	1050	1055	
Phe	Phe	Thr	Val	Glu	Ile	Ile	Leu	Gly	Met	Leu	Leu	Val	Phe	Leu	Ile	1060	1065	1070	
Leu	Met	Ser	Ile	Ala	Gly	Cys	Ile	Ile	Tyr	Tyr	Tyr	Ile	Gln	Val	Arg	1075	1080	1085	
Tyr	Gly	Lys	Lys	Val	Lys	Ala	Leu	Ser	Asp	Phe	Met	Gln	Leu	Asn	Pro	1090	1095	1100	
Glu	Tyr	Cys	Val	Asp	Asn	Lys	Tyr	Asn	Ala	Asp	Asp	Trp	Glu	Leu	Arg	1105	1110	1115	112
Gln	Asp	Asp	Val	Val	Leu	Gly	Gln	Gln	Cys	Gly	Glu	Gly	Ser	Phe	Gly	1125	1130	1135	
Lys	Val	Tyr	Leu	Gly	Thr	Gly	Asn	Asn	Val	Val	Ser	Leu	Met	Gly	Asp	1140	1145	1150	
Arg	Phe	Gly	Pro	Cys	Ala	Ile	Lys	Ile	Asn	Val	Asp	Asp	Pro	Ala	Ser	1155	1160	1165	
Thr	Glu	Asn	Leu	Asn	Tyr	Leu	Met	Glu	Ala	Asn	Ile	Met	Lys	Asn	Phe	1170	1175	1180	
Lys	Thr	Asn	Phe	Ile	Val	Gln	Leu	Tyr	Gly	Val	Ile	Ser	Thr	Val	Gln	1185	1190	1195	120
Pro	Ala	Met	Val	Val	Met	Glu	Met	Met	Asp	Leu	Gly	Asn	Leu	Arg	Asp	1205	1210	1215	
Tyr	Leu	Arg	Ser	Lys	Arg	Glu	Asp	Glu	Val	Phe	Asn	Glu	Thr	Asp	Cys	1220	1225	1230	
Asn	Phe	Phe	Asp	Ile	Ile	Pro	Arg	Asp	Lys	Phe	His	Glu	Trp	Ala	Ala	1235	1240	1245	
Gln	Ile	Cys	Asp	Gly	Met	Ala	Tyr	Leu	Glu	Ser	Leu	Lys	Phe	Cys	His				

1250	1255	1260
Arg Asp Leu Ala Ala Arg Asn Cys Met Ile Asn Arg Asp Glu Thr Val		
1265	1270	1275
Lys Ile Gly Asp Phe Gly Met Ala Arg Asp Leu Phe Tyr His Asp Tyr		128
	1285	1290
Tyr Lys Pro Ser Gly Lys Arg Met Met Pro Val Arg Trp Met Ser Pro		1295
	1300	1305
Glu Ser Leu Lys Asp Gly Lys Phe Asp Ser Lys Ser Asp Val Trp Ser		1310
	1315	1320
Phe Gly Val Val Leu Tyr Glu Met Val Thr Leu Gly Ala Gln Pro Tyr		1325
	1330	1335
Ile Gly Leu Ser Asn Asp Glu Val Leu Asn Tyr Ile Gly Met Ala Arg		1340
1345	1350	1355
Lys Val Ile Lys Lys Pro Glu Cys Cys Glu Asn Tyr Trp Tyr Lys Val		136
	1365	1370
Met Lys Met Cys Trp Arg Tyr Ser Pro Arg Asp Arg Pro Thr Phe Leu		1375
	1380	1385
Gln Leu Val His Leu Leu Ala Ala Glu Ala Ser Pro Glu Phe Arg Asp		1390
	1395	1400
Leu Ser Phe Val Leu Thr Asp Asn Gln Met Ile Leu Asp Asp Ser Glu		1405
	1410	1415
Ala Leu Asp Leu Asp Asp Ile Asp Asp Thr Asp Met Asn Asp Gln Val		1420
1425	1430	1435
Val Glu Val Ala Pro Asp Val Glu Asn Val Glu Val Gln Ser Asp Ser		144
	1445	1450
Glu Arg Arg Asn Thr Asp Ser Ile Pro Leu Lys Gln Phe Lys Thr Ile		1455
	1460	1465
Pro Pro Ile Asn Ala Thr Thr Ser His Ser Thr Ile Ser Ile Asp Glu		1470
	1475	1480
Thr Pro Met Lys Ala Lys Gln Arg Glu Gly Ser Leu Asp Glu Glu Tyr		1485
	1490	1495
Ala Leu Met Asn His Ser Gly Gly Pro Ser Asp Ala Glu Val Arg Thr		1500
1505	1510	1515
Tyr Ala Gly Asp Gly Asp Tyr Val Glu Arg Asp Val Arg Glu Asn Asp		152
	1525	1530
Val Pro Thr Arg Arg Asn Thr Gly Ala Ser Thr Ser Ser Tyr Thr Gly		1535
	1540	1545
Gly Gly Pro Tyr Cys Leu Thr Asn Arg Gly Gly Ser Asn Glu Arg Gly		1550
	1555	1560
Ala Gly Phe Gly Glu Ala Val Arg Leu Thr Asp Gly Val Gly Ser Gly		1565
	1570	1575
His Leu Asn Asp Asp Asp Tyr Val Glu Lys Glu Ile Ser Ser Met Asp		1580
1585	1590	1595
Thr Arg Arg Ser Thr Gly Ala Ser Ser Ser Ser Tyr Gly Val Pro Gln		160
	1605	1610
Thr Asn Trp Ser Gly Asn Arg Gly Ala Thr Tyr Tyr Thr Ser Lys Ala		1615
	1620	1625
Gln Gln Ala Ala Thr Ala Ala Ala Ala Ala Ala Ala Ala Leu Gln Gln		1630
	1635	1640
Gln Gln Asn Gly Gly Arg Gly Asp Arg Leu Thr Gln Leu Pro Gly Thr		1645
	1650	1655
Gly His Leu Gln Ser Thr Arg Gly Gly Gln Asp Gly Asp Tyr Ile Glu		1660
1665	1670	1675
Thr Glu Pro Lys Asn Tyr Arg Asn Asn Gly Ser Pro Ser Arg Asn Gly		168
	1685	1690
Asn Ser Arg Asp Ile Phe Asn Gly Arg Ser Ala Phe Gly Glu Asn Glu		1695
	1700	1705
His Leu Ile Glu Asp Asn Glu His His Pro Leu Val		1710
	1715	1720

<210> 13  
 <211> 139  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 13  
 Thr Ser Gly Ser Gly Met Gly Pro Thr Thr Leu His Lys Leu Thr Ile  
 1 5 10 15  
 Gly Gly Gln Ile Arg Leu Thr Gly Arg Val Gly Ser Gly Arg Phe Gly  
 20 25 30  
 Asn Val Ser Arg Gly Asp Tyr Arg Gly Glu Ala Val Ala Val Lys Val  
 35 40 45  
 Phe Asn Ala Leu Asp Glu Pro Ala Phe His Lys Glu Thr Glu Ile Phe  
 50 55 60  
 Glu Thr Arg Met Leu Arg His Pro Asn Val Leu Arg Tyr Ile Gly Ser  
 65 70 75 80  
 Asp Arg Val Asp Thr Gly Phe Val Thr Glu Leu Trp Leu Val Thr Glu  
 85 90 95  
 Tyr His Pro Ser Gly Ser Leu His Asp Phe Leu Leu Glu Asn Thr Val  
 100 105 110  
 Asn Ile Glu Thr Tyr Tyr Asn Leu Met Arg Ser Thr Ala Ser Gly Leu  
 115 120 125  
 Ala Phe Leu His Asn Gln Ile Gly Gly Ser Lys  
 130 135

<210> 14  
 <211> 62  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 14  
 Glu Asp Ala Ala Ser Asp Ile Ile Ala Asn Glu Asn Tyr Lys Cys Gly  
 1 5 10 15  
 Thr Val Arg Tyr Leu Ala Pro Glu Ile Leu Asn Ser Thr Met Gln Phe  
 20 25 30  
 Thr Val Phe Glu Ser Tyr Gln Cys Ala Asp Val Tyr Ser Phe Ser Leu  
 35 40 45  
 Val Met Trp Glu Thr Leu Cys Arg Cys Glu Asp Gly Asp Val  
 50 55 60

<210> 15  
 <211> 31  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 15  
 Lys Pro Ala Met Ala His Arg Asp Ile Lys Ser Lys Asn Ile Met Val  
 1 5 10 15  
 Lys Asn Asp Leu Thr Cys Ala Ile Gly Asp Leu Gly Leu Ser Leu  
 20 25 30

<210> 16  
 <211> 72  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 16  
 Ile Pro Tyr Ile Glu Trp Thr Asp Arg Asp Pro Gln Asp Ala Gln Met  
 1 5 10 15  
 Phe Asp Val Val Cys Thr Arg Arg Leu Arg Pro Thr Glu Asn Pro Leu  
 20 25 30  
 Trp Lys Asp His Pro Glu Met Lys His Ile Met Glu Ile Ile Lys Thr  
 35 40 45  
 Cys Trp Asn Gly Asn Pro Ser Ala Arg Phe Thr Ser Tyr Ile Cys Arg  
 50 55 60  
 Lys Arg Met Asp Glu Arg Gln Gln  
 65 70

<210> 17  
 <211> 150  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 17  
 Tyr Phe Glu Ser Val Asp Arg Phe Leu Tyr Ser Cys Val Gly Tyr Ser  
 1 5 10 15  
 Val Ala Thr Tyr Ile Met Gly Ile Lys Asp Arg His Ser Asp Asn Leu  
 20 25 30  
 Met Leu Thr Glu Asp Gly Lys Tyr Val His Ile Asp Phe Gly His Ile  
 35 40 45  
 Leu Gly His Gly Lys Thr Lys Leu Gly Ile Gln Arg Asp Arg Gln Pro  
 50 55 60  
 Phe Ile Leu Thr Glu His Phe Met Thr Val Ile Arg Ser Gly Lys Ser  
 65 70 75 80  
 Val Asp Gly Asn Ser His Glu Leu Gln Lys Phe Lys Thr Leu Cys Val  
 85 90 95  
 Glu Ala Tyr Glu Val Met Trp Asn Asn Arg Asp Leu Phe Val Ser Leu  
 100 105 110  
 Phe Thr Leu Met Leu Gly Met Glu Leu Pro Glu Leu Ser Thr Lys Ala  
 115 120 125  
 Asp Leu Asp His Leu Lys Lys Thr Leu Phe Cys Asn Gly Glu Ser Lys  
 130 135 140  
 Glu Glu Ala Arg Lys Phe  
 145 150

<210> 18  
 <211> 113  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 18  
 Ser Pro Leu Asp Pro Val Tyr Lys Leu Gly Glu Met Ile Ile Asp Lys  
 1 5 10 15  
 Ala Ile Val Leu Gly Ser Ala Lys Arg Pro Leu Met Leu His Trp Lys  
 20 25 30  
 Asn Lys Asn Pro Lys Ser Asp Leu His Leu Pro Phe Cys Ala Met Ile  
 35 40 45  
 Phe Lys Asn Gly Asp Asp Leu Arg Gln Asp Met Leu Val Leu Gln Val  
 50 55 60  
 Leu Glu Val Met Asp Asn Ile Trp Lys Ala Ala Asn Ile Asp Cys Cys  
 65 70 75 80  
 Leu Asn Pro Tyr Ala Val Leu Pro Met Gly Glu Met Ile Gly Ile Ile  
 85 90 95

Glu Val Val Pro Asn Cys Lys Thr Ile Phe Glu Ile Gln Val Gly Thr  
 100 105 110  
 Gly

<210> 19  
 <211> 106  
 <212> PRT  
 <213> *Caenorhabditis elegans*

<400> 19  
 Leu Ala Phe Val Trp Thr Asp Arg Glu Asn Phe Ser Glu Leu Tyr Val  
 1 5 10 15  
 Met Leu Glu Lys Trp Lys Pro Pro Ser Val Ala Ala Ala Leu Thr Leu  
 20 25 30  
 Leu Gly Lys Arg Cys Thr Asp Arg Val Ile Arg Lys Phe Ala Val Glu  
 35 40 45  
 Lys Leu Asn Glu Gln Leu Ser Pro Val Thr Phe His Leu Phe Ile Leu  
 50 55 60  
 Pro Leu Ile Gln Ala Leu Lys Tyr Glu Pro Arg Ala Gln Ser Glu Val  
 65 70 75 80  
 Gly Met Met Leu Leu Thr Arg Ala Leu Cys Asp Tyr Arg Ile Gly His  
 85 90 95  
 Arg Leu Phe Trp Leu Leu Arg Ala Glu Ile  
 100 105

<210> 20  
 <211> 139  
 <212> PRT  
 <213> *Caenorhabditis elegans*

<400> 20  
 Glu Tyr Trp Ile Val Thr Glu Phe His Glu Arg Leu Ser Leu Tyr Glu  
 1 5 10 15  
 Leu Leu Lys Asn Asn Val Ile Ser Ile Thr Ser Ala Asn Arg Ile Ile  
 20 25 30  
 Met Ser Met Ile Asp Gly Leu Gln Phe Leu His Asp Asp Arg Pro Tyr  
 35 40 45  
 Phe Phe Gly His Pro Lys Lys Pro Ile Ile His Arg Asp Ile Lys Ser  
 50 55 60  
 Lys Asn Ile Leu Val Lys Ser Asp Met Thr Thr Cys Ile Ala Asp Phe  
 65 70 75 80  
 Gly Leu Ala Arg Ile Tyr Ser Tyr Asp Ile Glu Gln Ser Asp Leu Leu  
 85 90 95  
 Gly Gln Val Gly Thr Lys Arg Tyr Met Ser Pro Glu Met Leu Glu Gly  
 100 105 110  
 Ala Thr Glu Phe Thr Pro Thr Ala Phe Lys Ala Met Asp Val Tyr Ser  
 115 120 125  
 Met Gly Leu Val Met Trp Glu Val Ile Ser Arg  
 130 135

<210> 21  
 <211> 61  
 <212> PRT  
 <213> *Caenorhabditis elegans*

<400> 21  
 Ile Gly Phe Asp Pro Thr Ile Gly Arg Met Arg Asn Tyr Val Val Ser  
 1 5 10 15  
 Lys Lys Glu Arg Pro Gln Trp Arg Asp Glu Ile Ile Lys His Glu Tyr  
 20 25 30  
 Met Ser Leu Leu Lys Lys Val Thr Glu Glu Met Trp Asp Pro Glu Ala  
 35 40 45  
 Cys Ala Arg Ile Thr Ala Gly Cys Ala Phe Ala Arg Val  
 50 55 60

<210> 22  
 <211> 20  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 22  
 Pro Ile Thr Asp Phe Gln Leu Ile Ser Lys Gly Arg Phe Gly Lys Val  
 1 5 10 15  
 Phe Lys Ala Gln  
 20

<210> 23  
 <211> 163  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 23  
 Thr Asp Ser Glu Thr Arg Ser Arg Phe Ser Leu Gly Trp Tyr Asn Asn  
 1 5 10 15  
 Pro Asn Arg Ser Pro Gln Thr Ala Glu Val Arg Gly Leu Ile Gly Lys  
 20 25 30  
 Gly Val Arg Phe Tyr Leu Leu Ala Gly Glu Val Tyr Val Glu Asn Leu  
 35 40 45  
 Cys Asn Ile Pro Val Phe Val Gln Ser Ile Gly Ala Asn Met Lys Asn  
 50 55 60  
 Gly Phe Gln Leu Asn Thr Val Ser Lys Leu Pro Pro Thr Gly Thr Met  
 65 70 75 80  
 Lys Val Phe Asp Met Arg Leu Phe Ser Lys Gln Leu Arg Thr Ala Ala  
 85 90 95  
 Glu Lys Thr Tyr Gln Asp Val Tyr Cys Leu Ser Arg Met Cys Thr Val  
 100 105 110  
 Arg Val Ser Phe Cys Lys Gly Trp Gly Glu His Tyr Arg Arg Ser Thr  
 115 120 125  
 Val Leu Arg Ser Pro Val Trp Phe Gln Ala His Leu Asn Asn Pro Met  
 130 135 140  
 His Trp Val Asp Ser Val Leu Thr Cys Met Gly Ala Pro Pro Arg Ile  
 145 150 155 160  
 Cys Ser Ser

<210> 24  
 <211> 44  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 24



Arg Ala Phe Arg Phe Pro Val Ile Arg Tyr Glu Ser Gln Val Lys Ser  
 1 5 10 15  
 Ile Leu Thr Cys Arg His Ala Phe Asn Ser His Ser Arg Asn Val Cys  
 20 25 30  
 Leu Asn Pro Tyr His Tyr Arg Trp Val Glu Leu Pro  
 35 40

<210> 25  
 <211> 38  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 25  
 Val Glu Tyr Glu Glu Ser Pro Ser Trp Leu Lys Leu Ile Tyr Tyr Glu  
 1 5 10 15  
 Glu Gly Thr Met Ile Gly Glu Lys Ala Asp Val Glu Gly His His Cys  
 20 25 30  
 Leu Ile Asp Gly Phe Thr  
 35

<210> 26  
 <211> 60  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 26  
 Asn Leu Ala Glu Thr Gly His Ser Lys Ile Met Arg Ala Ala His Lys  
 1 5 10 15  
 Val Ser Asn Pro Glu Ile Gly Tyr Cys Cys His Pro Thr Glu Tyr Asp  
 20 25 30  
 Tyr Ile Lys Leu Ile Tyr Val Asn Arg Asp Gly Arg Val Ser Ile Ala  
 35 40 45  
 Asn Val Asn Gly Met Ile Ala Lys Lys Cys Gly Cys  
 50 55 60

<210> 27  
 <211> 20  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 27  
 Asp Trp Ile Val Ala Pro Pro Arg Tyr Asn Ala Tyr Met Cys Arg Gly  
 1 5 10 15  
 Asp Cys His Tyr  
 20

<210> 28  
 <211> 43  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 28  
 Val Cys Asn Ala Glu Ala Gln Ser Lys Gly Cys Cys Leu Tyr Asp Leu  
 1 5 10 15  
 Glu Ile Glu Phe Glu Lys Ile Gly Trp Asp Trp Ile Val Ala Pro Pro

20 25 30  
 Arg Tyr Asn Ala Tyr Met Cys Arg Gly Asp Cys  
 35 40

<210> 29  
 <211> 70  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 29  
 Asp Cys His Tyr Asn Ala His His Phe Asn Leu Ala Glu Thr Gly His  
 1 5 10 15  
 Ser Lys Ile Met Arg Ala Ala His Lys Val Ser Asn Pro Glu Ile Gly  
 20 25 30  
 Tyr Cys Cys His Pro Thr Glu Tyr Asp Tyr Ile Lys Leu Ile Tyr Val  
 35 40 45  
 Asn Arg Asp Gly Arg Val Ser Ile Ala Asn Val Asn Gly Met Ile Ala  
 50 55 60  
 Lys Lys Cys Gly Cys Ser  
 65 70

<210> 30  
 <211> 35  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 30  
 Cys Cys Leu Tyr Asp Leu Glu Ile Glu Phe Glu Lys Ile Gly Trp Asp  
 1 5 10 15  
 Trp Ile Val Ala Pro Pro Arg Tyr Asn Ala Tyr Met Cys Arg Gly Asp  
 20 25 30  
 Cys His Tyr  
 35

<210> 31  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Degenerate probe

<221> misc\_feature  
 <222> (1)...(23)  
 <223> n = A,T,C or G

<400> 31  
 ggntgggayt rnrtnrtngc ncc

23

<210> 32  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Degenerate probe

<221> misc\_feature  
 <222> (1)...(18)  
 <223> n = A,T,C or G

<400> 32  
 tgytgynnnnc cnacngar

18

<210> 33  
 <211> 127  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 33  
 Lys Phe His Glu Trp Ala Ala Gln Ile Cys Asp Gly Met Ala Tyr Leu  
 1 5 10 15  
 Glu Ser Leu Lys Phe Cys His Arg Asp Leu Ala Ala Arg Asn Cys Met  
 20 25 30  
 Ile Asn Arg Asp Glu Thr Val Lys Ile Gly Asp Phe Gly Met Ala Arg  
 35 40 45  
 Asp Leu Phe Tyr His Asp Tyr Tyr Lys Pro Ser Gly Lys Arg Met Met  
 50 55 60  
 Pro Val Arg Trp Met Ser Pro Glu Ser Leu Lys Asp Gly Lys Phe Asp  
 65 70 75 80  
 Ser Lys Ser Asp Val Trp Ser Phe Gly Val Val Leu Tyr Glu Met Val  
 85 90 95  
 Thr Leu Gly Ala Gln Pro Tyr Ile Gly Leu Ser Asn Asp Glu Val Leu  
 100 105 110  
 Asn Tyr Ile Gly Met Ala Arg Lys Val Ile Lys Lys Pro Glu Cys  
 115 120 125

<210> 34  
 <211> 131  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 34  
 Asn Thr Thr Cys Gln Lys Ser Cys Ala Tyr Asp Arg Leu Leu Pro Thr  
 1 5 10 15  
 Lys Glu Ile Gly Pro Gly Cys Asp Ala Asn Gly Asp Arg Cys His Asp  
 20 25 30  
 Gln Cys Val Gly Gly Cys Glu Arg Val Asn Asp Ala Thr Ala Cys His  
 35 40 45  
 Ala Cys Lys Asn Val Tyr His Lys Gly Lys Cys Ile Glu Lys Cys Asp  
 50 55 60  
 Ala His Leu Tyr Leu Leu Leu Gln Arg Arg Cys Val Thr Arg Glu Gln  
 65 70 75 80  
 Cys Leu Gln Leu Asn Pro Val Leu Ser Asn Lys Thr Val Pro Ile Lys  
 85 90 95  
 Ala Thr Ala Gly Leu Cys Ser Asp Lys Cys Pro Asp Gly Tyr Gln Ile  
 100 105 110  
 Asn Pro Asp Asp His Arg Glu Cys Arg Lys Cys Val Gly Lys Cys Glu  
 115 120 125  
 Ile Val Cys  
 130

<210> 35  
 <211> 103

<212> PRT  
 <213> Caenorhabditis elegans

<400> 35

Phe	Asp	Gln	Lys	Ala	Cys	Glu	Ser	Leu	Val	Lys	Lys	Leu	Lys	Asp	Lys
1				5					10					15	
Lys	Asn	Asp	Leu	Gln	Asn	Leu	Ile	Asp	Val	Val	Leu	Ser	Lys	Gly	Thr
			20					25					30		
Lys	Tyr	Thr	Gly	Cys	Ile	Thr	Ile	Pro	Arg	Thr	Leu	Asp	Gly	Arg	Leu
		35					40					45			
Gln	Val	His	Gly	Arg	Lys	Gly	Phe	Pro	His	Val	Val	Tyr	Gly	Lys	Leu
	50					55					60				
Trp	Arg	Phe	Asn	Glu	Met	Thr	Lys	Asn	Glu	Thr	Arg	His	Val	Asp	His
65					70					75				80	
Cys	Lys	His	Ala	Phe	Glu	Met	Lys	Ser	Asp	Met	Val	Cys	Val	Asn	Pro
				85					90					95	
Tyr	His	Tyr	Glu	Ile	Val	Ile									
			100												

<210> 36  
 <211> 79  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 36

Asn	Arg	Tyr	Ser	Leu	Gly	Leu	Glu	Pro	Asn	Pro	Ile	Arg	Glu	Pro	Val
1				5					10					15	
Ala	Phe	Lys	Val	Arg	Lys	Ala	Ile	Val	Asp	Gly	Ile	Arg	Phe	Ser	Tyr
			20					25					30		
Lys	Lys	Asp	Gly	Ser	Val	Trp	Leu	Gln	Asn	Arg	Met	Lys	Tyr	Pro	Val
		35					40					45			
Phe	Val	Thr	Ser	Gly	Tyr	Leu	Asp	Glu	Gln	Ser	Gly	Gly	Leu	Lys	Lys
	50					55					60				
Asp	Lys	Val	His	Lys	Val	Tyr	Gly	Cys	Ala	Ser	Ile	Lys	Thr	Phe	
65					70					75					

<210> 37  
 <211> 106  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 37

Lys	Lys	Thr	Thr	Thr	Arg	Arg	Asn	Ala	Trp	Gly	Asn	Met	Ser	Tyr	Ala
1				5					10					15	
Glu	Leu	Ile	Thr	Thr	Ala	Ile	Met	Ala	Ser	Pro	Glu	Lys	Arg	Leu	Thr
			20					25					30		
Leu	Ala	Gln	Val	Tyr	Glu	Trp	Met	Val	Gln	Asn	Val	Pro	Tyr	Phe	Arg
		35					40					45			
Asp	Lys	Gly	Asp	Ser	Asn	Ser	Ser	Ala	Gly	Trp	Lys	Asn	Ser	Ile	Arg
	50					55					60				
His	Asn	Leu	Ser	Leu	His	Ser	Arg	Phe	Met	Arg	Ile	Gln	Asn	Glu	Gly
65					70					75				80	
Ala	Gly	Lys	Ser	Ser	Trp	Trp	Val	Ile	Asn	Pro	Asp	Ala	Lys	Pro	Gly
				85					90					95	
Met	Asn	Pro	Arg	Arg	Thr	Arg	Glu	Arg	Ser						
			100					105							

<210> 38  
 <211> 60  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 38  
 Glu Ile Lys Leu Ser Asp Phe Lys His Gln Leu Phe Glu Leu Ile Ala  
 1 5 10 15  
 Pro Met Lys Trp Gly Thr Tyr Ser Val Lys Pro Gln Asp Tyr Val Phe  
 20 25 30  
 Arg Gln Leu Asn Asn Phe Gly Glu Ile Glu Val Ile Phe Asn Asp Asp  
 35 40 45  
 Gln Pro Leu Ser Lys Leu Glu Leu His Gly Thr Phe  
 50 55 60

<210> 39  
 <211> 2784  
 <212> DNA  
 <213> Caenorhabditis elegans

<400> 39  
 atgaagctaa tagcaacttc tcttctagtt cccgacgagc acacaccgat gatgtcacca 60  
 gtgaatacaa ctacaaagat tctacaacgg agtgggtatta aaatggaaat cccgccatat 120  
 ttggatccag acagtcagga tgatgacccg gaagatggtg tcaactaccc ggatccagat 180  
 ttatttgaca caaaaaacac aaatatgacc gagtacgatt tggatgtgtt gaagcttgga 240  
 aaaccagcag tagatgaagc acggaaaaag atcgaagttc ccgacgctag tgcgccgcca 300  
 aacaaaattg tagaatattt gatgtattat agaacgttaa aagaaagtga actcatacaa 360  
 ctgaatgcgt atcggacaaa acgaaatcga ttatcgttga acttgggtcaa aaacaatatt 420  
 gatcgagagt tcgaccaaaa agcttgcgag tccctggtga aaaaattgaa ggataagaag 480  
 aatgatctcc agaacctgat tgatgtggtt ctttcaaaaag gtacaaaata taccggttgc 540  
 attacaattc caaggacact tgatggccgg ttacaggtcc acggaagaaa aggtttccct 600  
 cacgtagtct atggcaaact gtggagggtt aatgaaatga caaaaaacga aacgcgtcat 660  
 gtggaccact gcaagcacgc atttgaaatg aaaagtgaca tggatatgcgt gaatccctat 720  
 cactacgaaa ttgtcatttg aactatgatt gttgggcaga gggatcatga caatcgagat 780  
 atgccgccgc cacatcaacg ctaccacact ccaggtcggc aggatccagt tgacgatatg 840  
 agtagattta taccaccagc ttccattcgt ccgcctccga tgaacatgca cacaaggcct 900  
 cagcctatgc ctcaacaatt gccttcagtt ggcgcaacgt ttgccatcc tctcccacat 960  
 caggcgccac ataaccagg gggtttcacat ccgtactcca ttgctccaca gaccattac 1020  
 ccgttgaaca tgaaccat tccgcaaatt ccgcaaattg cacaattgcc accacctctc 1080  
 catcagggat atggaatgaa tgggcccaggt tgctcttcag aaaacaacaa tccattccac 1140  
 caaatcacc attataatga tattagccat ccaaatcact attcctacga ctgtggtccg 1200  
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 <213> Caenorhabditis elegans

<400> 40

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Pro	Ser	Cys	Ser	Ser	Glu	Asn	Asn	Asn	Pro	Phe	His	Gln	Asn	His	His			
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Tyr	Asn	Asp	Ile	Ser	His	Pro	Asn	His	Tyr	Ser	Tyr	Asp	Cys	Gly	Pro			
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Asn	Leu	Tyr	Gly	Phe	Pro	Thr	Pro	Tyr	Pro	Asp	Phe	His	His	Pro	Phe			
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Val	Ala	Phe	Lys	Val	Arg	Lys	Ala	Ile	Val	Asp	Gly	Ile	Arg	Phe	Ser			
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Tyr	Lys	Lys	Asp	Gly	Ser	Val	Trp	Leu	Gln	Asn	Arg	Met	Lys	Tyr	Pro			
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Lys	Asp	Lys	Val	His	Lys	Val	Tyr	Gly	Cys	Ala	Ser	Ile	Lys	Thr	Phe			
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Gln	Met	Ala	Thr	Met	Tyr	Leu	Gln	Gly	Lys	Leu	Thr	Pro	Met	Asn	Tyr			
	690					695					700							
Ile	Tyr	Glu	Lys	Lys	Thr	Gln	Glu	Glu	Leu	Arg	Arg	Glu	Ala	Thr	Arg			
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Thr	Thr	Asp	Ser	Leu	Ala	Lys	Tyr	Cys	Cys	Val	Arg	Val	Ser	Phe	Cys			
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 Tyr Gly Gly Lys Pro Ser His Gly Leu Glu Asp Ile Pro Asp Val Glu  
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 Ser Pro Val Asn Thr Thr Thr Lys Ile Leu Gln Arg Ser Gly Ile Lys  
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 Met Glu Ile Pro Pro Tyr Leu Asp Pro Asp Ser Gln Asp Asp Asp Pro  
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 Glu Asp Gly Val Asn Tyr Pro Asp Pro Asp Leu Phe Asp Thr Lys Asn  
 115 120 125  
 Thr Asn Met Thr Glu Tyr Asp Leu Asp Val Leu Lys Leu Gly Lys Pro  
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 Pro Pro Asn Lys Ile Val Glu Tyr Leu Met Tyr Tyr Arg Thr Leu Lys  
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 Glu Ser Glu Leu Ile Gln Leu Asn Ala Tyr Arg Thr Lys Arg Asn Arg  
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 Lys Ala Cys Glu Ser Leu Val Lys Lys Leu Lys Asp Lys Lys Asn Asp  
 210 215 220  
 Leu Gln Asn Leu Ile Asp Val Val Leu Ser Lys Gly Thr Lys Tyr Thr  
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 Gly Cys Ile Thr Ile Pro Arg Thr Leu Asp Gly Arg Leu Gln Val His  
 245 250 255  
 Gly Arg Lys Gly Phe Pro His Val Val Tyr Gly Lys Leu Trp Arg Phe  
 260 265 270  
 Asn Glu Met Thr Lys Asn Glu Thr Arg His Val Asp His Cys Lys His  
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 Ala Phe Glu Met Lys Ser Asp Met Val Cys Val Asn Pro Tyr His Tyr  
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 Glu Ile Val Ile Gly Thr Met Ile Val Gly Gln Arg Asp His Asp Asn  
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 Arg Asp Met Pro Pro Pro His Gln Arg Tyr His Thr Pro Gly Arg Gln  
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 Pro His Asn Pro Gly Val Ser His Pro Tyr Ser Ile Ala Pro Gln Thr  
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 His Tyr Pro Leu Asn Met Asn Pro Ile Pro Gln Met Pro Gln Met Pro  
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 Gln Met Pro Pro Pro Leu His Gln Gly Tyr Gly Met Asn Gly Pro Ser



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Tyr	Gly	Phe	Pro	Thr	Pro	Tyr	Pro	Asp	Phe	His	His	Pro	Phe	Asn	Gln		
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Thr	Asp	Gly	Glu	Val	Leu	Glu	Asn	Ile	Met	Pro	Glu	Asp	Ala	Pro	Tyr		
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Glu	Lys	Lys	Thr	Gln	Glu	Glu	Leu	Arg	Arg	Glu	Ala	Thr	Arg	Thr	Thr		
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<212> PRT

<213> Caenorhabditis elegans

<400> 42

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Glu	Tyr	Glu	Arg	Asn	Leu	Leu	Gly	Ala	Gly	Ala	Gly	Phe	Asn	Leu	Leu	
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Leu	Lys	Leu	Ile	Thr	Pro	Lys	Thr	Glu	Val	Pro	Asp	Glu	His	Thr	Pro	
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Asn	Arg	Leu	Ser	Leu	Asn	Leu	Val	Lys	Asn	Asn	Ile	Asp	Arg	Glu	Phe	
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Asn	Asp	Leu	Gln	Asn	Leu	Ile	Asp	Val	Val	Leu	Ser	Lys	Gly	Thr	Lys	
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Tyr	Thr	Gly	Cys	Ile	Thr	Ile	Pro	Arg	Thr	Leu	Asp	Gly	Arg	Leu	Gln	
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Gln	Thr	His	Tyr	Pro	Leu	Asn	Met	Asn	Pro	Ile	Pro	Gln	Met	Pro	Gln	

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<210> 53  
 <211> 3119  
 <212> DNA  
 <213> *Caenorhabditis elegans*

<400> 53						
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ctgatgtaga	ggaatatgag	aggaacctgc	tcgggggctgg	agcaggtttt	aatctgctca	240
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attatagaac	gttaaaagaa	agtgaactca	tacaactgaa	tgcgtatcgg	acaaaacgaa	720
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taattcggtc	tagtaacaaa	ttcattgaag	aatttgattc	gccgatttgt	ggtgtgacag	1860
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caatctgcc	gtacataacc	aactgcttcg	agccgctagg	aatggaagat	tttgcaaaat	2700
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cgcatatgtc	atatattgca	ccgtggccct	ttttattgta	acttttaata	tattttcttc	3060
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<210> 54

<211> 103

<212> PRT

<213> *Caenorhabditis elegans*

<400> 54

Lys	Lys	Thr	Thr	Thr	Arg	Arg	Asn	Ala	Trp	Gly	Asn	Met	Ser	Tyr	Ala
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Glu	Leu	Ile	Thr	Thr	Ala	Ile	Met	Ala	Ser	Pro	Glu	Lys	Arg	Leu	Thr
		20						25					30		
Leu	Ala	Gln	Val	Tyr	Glu	Trp	Met	Val	Gln	Asn	Val	Pro	Tyr	Phe	Arg
		35					40						45		
Asp	Lys	Gly	Asp	Ser	Asn	Ser	Ser	Ala	Gly	Trp	Lys	Asn	Ser	Ile	Arg
	50					55					60				
His	Asn	Leu	Ser	Leu	His	Ser	Arg	Phe	Met	Arg	Ile	Gln	Asn	Glu	Gly
65					70					75				80	
Ala	Gly	Lys	Ser	Ser	Trp	Trp	Val	Ile	Asn	Pro	Asp	Ala	Lys	Pro	Gly

Met Asn Pro Arg Arg Thr Arg  
100

90

95

<210> 55  
<211> 41  
<212> PRT  
<213> Caenorhabditis elegans

<400> 55  
Thr Phe Met Asn Thr Pro Asp Asp Val Met Met Asn Asp Asp Met Glu  
1 5 10 15  
Pro Ile Pro Arg Asp Arg Cys Asn Thr Trp Pro Met Arg Arg Pro Gln  
20 25 30  
Leu Glu Pro Pro Leu Asn Ser Ser Pro  
35 40

<210> 56  
<211> 109  
<212> PRT  
<213> Caenorhabditis elegans

<400> 56  
Asp Asp Thr Val Ser Gly Lys Lys Thr Thr Thr Arg Arg Asn Ala Trp  
1 5 10 15  
Gly Asn Met Ser Tyr Ala Glu Leu Ile Thr Thr Ala Ile Met Ala Ser  
20 25 30  
Pro Glu Lys Arg Leu Thr Leu Ala Gln Val Tyr Glu Trp Met Val Gln  
35 40 45  
Asn Val Pro Tyr Phe Arg Asp Lys Gly Asp Ser Asn Ser Ser Ala Gly  
50 55 60  
Trp Lys Asn Ser Ile Arg His Asn Leu Ser Leu His Ser Arg Phe Met  
65 70 75 80  
Arg Ile Gln Asn Glu Gly Ala Gly Lys Ser Ser Trp Trp Val Ile Asn  
85 90 95  
Pro Asp Ala Lys Pro Gly Met Asn Pro Arg Arg Thr Arg  
100 105

<210> 57  
<211> 655  
<212> PRT  
<213> Homo sapiens

<400> 57  
Met Ala Glu Ala Pro Gln Val Val Glu Ile Asp Pro Asp Phe Glu Pro  
1 5 10 15  
Leu Pro Arg Pro Arg Ser Cys Thr Trp Pro Leu Pro Arg Pro Glu Phe  
20 25 30  
Ser Gln Ser Asn Ser Ala Thr Ser Ser Pro Ala Pro Ser Gly Ser Ala  
35 40 45  
Ala Ala Asn Pro Asp Ala Ala Ala Gly Leu Pro Ser Ala Ser Ala Ala  
50 55 60  
Ala Val Ser Ala Asp Phe Met Ser Asn Leu Ser Leu Leu Glu Glu Ser  
65 70 75 80  
Glu Asp Phe Pro Gln Ala Pro Gly Ser Val Ala Ala Ala Val Ala Ala  
85 90 95

Ala	Ala	Ala	Ala	Ala	Ala	Thr	Gly	Gly	Leu	Cys	Gly	Asp	Phe	Gln	Gly
			100					105					110		
Pro	Glu	Ala	Gly	Cys	Leu	His	Pro	Ala	Pro	Pro	Gln	Pro	Pro	Pro	Pro
		115					120					125			
Gly	Pro	Val	Ser	Gln	His	Pro	Pro	Val	Pro	Pro	Ala	Ala	Ala	Gly	Pro
	130					135					140				
Leu	Ala	Gly	Gln	Pro	Arg	Lys	Ser	Ser	Ser	Ser	Arg	Arg	Asn	Ala	Trp
145					150					155					160
Gly	Asn	Leu	Ser	Tyr	Ala	Asp	Leu	Ile	Thr	Lys	Ala	Ile	Glu	Ser	Ser
				165					170					175	
Ala	Glu	Lys	Arg	Leu	Thr	Leu	Ser	Gln	Ile	Tyr	Glu	Trp	Met	Val	Lys
			180					185					190		
Ser	Val	Pro	Tyr	Phe	Lys	Asp	Lys	Gly	Asp	Ser	Asn	Ser	Ser	Ala	Gly
		195					200				205				
Trp	Lys	Asn	Ser	Ile	Arg	His	Asn	Leu	Ser	Leu	His	Ser	Lys	Phe	Ile
	210					215					220				
Arg	Val	Gln	Asn	Glu	Gly	Thr	Gly	Lys	Ser	Ser	Trp	Trp	Met	Leu	Asn
225					230					235					240
Pro	Glu	Gly	Gly	Lys	Ser	Gly	Lys	Ser	Pro	Arg	Arg	Arg	Ala	Ala	Ser
				245				250					255		
Met	Asp	Asn	Asn	Ser	Lys	Phe	Ala	Lys	Ser	Arg	Ser	Arg	Ala	Ala	Lys
			260					265					270		
Lys	Lys	Ala	Ser	Leu	Gln	Ser	Gly	Gln	Glu	Gly	Ala	Gly	Asp	Ser	Pro
		275					280					285			
Gly	Ser	Gln	Phe	Ser	Lys	Trp	Pro	Ala	Ser	Pro	Gly	Ser	His	Ser	Asn
	290					295					300				
Asp	Asp	Phe	Asp	Asn	Trp	Ser	Thr	Phe	Arg	Pro	Arg	Thr	Ser	Ser	Asn
305					310					315					320
Ala	Ser	Thr	Ile	Ser	Gly	Arg	Leu	Ser	Pro	Ile	Met	Thr	Glu	Gln	Asp
				325					330					335	
Asp	Leu	Gly	Glu	Gly	Asp	Val	His	Ser	Met	Val	Tyr	Pro	Pro	Ser	Ala
			340					345					350		
Ala	Lys	Met	Ala	Ser	Thr	Leu	Pro	Ser	Leu	Ser	Glu	Ile	Ser	Asn	Pro
		355					360					365			
Glu	Asn	Met	Glu	Asn	Leu	Leu	Asp	Asn	Leu	Asn	Leu	Leu	Ser	Ser	Pro
	370					375					380				
Thr	Ser	Leu	Thr	Val	Ser	Thr	Gln	Ser	Ser	Pro	Gly	Thr	Met	Met	Gln
385					390					395					400
Gln	Thr	Pro	Cys	Tyr	Ser	Phe	Ala	Pro	Pro	Asn	Thr	Ser	Leu	Asn	Ser
				405					410					415	
Pro	Ser	Pro	Asn	Tyr	Gln	Lys	Tyr	Thr	Tyr	Gly	Gln	Ser	Ser	Met	Ser
			420					425					430		
Pro	Leu	Pro	Gln	Met	Pro	Ile	Gln	Thr	Leu	Gln	Asp	Asn	Lys	Ser	Ser
		435					440					445			
Tyr	Gly	Gly	Met	Ser	Gln	Tyr	Asn	Cys	Ala	Pro	Gly	Leu	Leu	Lys	Glu
	450					455					460				
Leu	Leu	Thr	Ser	Asp	Ser	Pro	Pro	His	Asn	Asp	Ile	Met	Thr	Pro	Val
465					470					475					480
Asp	Pro	Gly	Val	Ala	Gln	Pro	Asn	Ser	Arg	Val	Leu	Gly	Gln	Asn	Val
				485					490					495	
Met	Met	Gly	Pro	Asn	Ser	Val	Met	Ser	Thr	Tyr	Gly	Ser	Gln	Ala	Ser
			500					505					510		
His	Asn	Lys	Met	Met	Asn	Pro	Ser	Ser	His	Thr	His	Pro	Gly	His	Ala
		515					520					525			
Gln	Gln	Thr	Ser	Ala	Val	Asn	Gly	Arg	Pro	Leu	Pro	His	Thr	Val	Ser
	530					535					540				
Thr	Met	Pro	His	Thr	Ser	Gly	Met	Asn	Arg	Leu	Thr	Gln	Val	Lys	Thr
545					550					555					560
Pro	Val	Gln	Val	Pro	Leu	Pro	His	Pro	Met	Gln	Met	Ser	Ala	Leu	Gly



				565					570					575		
Gly	Tyr	Ser	Ser	Val	Ser	Ser	Cys	Asn	Gly	Tyr	Gly	Arg	Met	Gly	Leu	
			580					585					590			
Leu	His	Gln	Glu	Lys	Leu	Pro	Ser	Asp	Leu	Asp	Gly	Met	Phe	Ile	Glu	
		595					600					605				
Arg	Leu	Asp	Cys	Asp	Met	Glu	Ser	Ile	Ile	Arg	Asn	Asp	Leu	Met	Asp	
	610					615					620					
Gly	Asp	Thr	Leu	Asp	Phe	Asn	Phe	Asp	Asn	Val	Leu	Pro	Asn	Gln	Ser	
625					630					635					640	
Phe	Pro	His	Ser	Val	Lys	Thr	Thr	Thr	His	Ser	Trp	Val	Ser	Gly		
				645					650					655		

<210> 58  
 <211> 98  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 58

Lys	Pro	Asn	Pro	Trp	Gly	Glu	Glu	Ser	Tyr	Ser	Asp	Ile	Ile	Ala	Lys	
1				5				10						15		
Ala	Leu	Glu	Ser	Ala	Pro	Asp	Gly	Arg	Leu	Lys	Leu	Asn	Glu	Ile	Tyr	
			20				25						30			
Gln	Trp	Phe	Ser	Asp	Asn	Ile	Pro	Tyr	Phe	Gly	Glu	Arg	Ser	Ser	Pro	
		35				40						45				
Glu	Glu	Ala	Ala	Gly	Trp	Lys	Asn	Ser	Ile	Arg	His	Asn	Leu	Ser	Leu	
	50					55					60					
His	Ser	Arg	Phe	Met	Arg	Ile	Gln	Asn	Glu	Gly	Ala	Gly	Lys	Ser	Ser	
65					70					75					80	
Trp	Trp	Val	Ile	Asn	Pro	Asp	Ala	Lys	Pro	Gly	Met	Asn	Pro	Arg	Arg	
				85					90					95		

Thr Arg

<210> 59  
 <211> 7  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 59

Trp	Lys	Asn	Ser	Ile	Arg	His										
1				5												

<210> 60  
 <211> 121  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 60

Gln	Val	Leu	Asp	Asp	His	Asp	Tyr	Gly	Arg	Cys	Val	Asp	Trp	Trp	Gly	
1				5				10						15		
Val	Gly	Val	Val	Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	
			20				25						30			
Ser	Lys	Asp	His	Asn	Lys	Leu	Phe	Glu	Leu	Ile	Met	Ala	Gly	Asp	Leu	
		35				40						45				
Arg	Phe	Pro	Ser	Lys	Leu	Ser	Gln	Glu	Ala	Arg	Thr	Leu	Leu	Thr	Gly	
	50					55					60					

Leu	Leu	Val	Lys	Asp	Pro	Thr	Gln	Arg	Leu	Gly	Gly	Gly	Pro	Glu	Asp
65					70					75					80
Ala	Leu	Glu	Ile	Cys	Arg	Ala	Asp	Phe	Phe	Arg	Thr	Val	Asp	Trp	Glu
				85					90					95	
Ala	Thr	Tyr	Arg	Lys	Glu	Ile	Glu	Pro	Pro	Tyr	Lys	Pro	Asn	Val	Gln
			100					105					110		
Ser	Glu	Thr	Asp	Thr	Ser	Tyr	Phe	Asp							
		115					120								

<210> 61  
 <211> 66  
 <212> PRT  
 <213> Caenorhabditis elegans

Thr	Met	Glu	Asp	Phe	Asp	Phe	Leu	Lys	Val	Leu	Gly	Lys	Gly	Thr	Phe
1				5					10					15	
Gly	Lys	Val	Ile	Leu	Cys	Lys	Glu	Lys	Arg	Thr	Gln	Lys	Leu	Tyr	Ala
			20					25					30		
Ile	Lys	Ile	Leu	Lys	Lys	Asp	Val	Ile	Ile	Ala	Arg	Glu	Glu	Val	Ala
		35					40					45			
His	Thr	Leu	Thr	Glu	Asn	Arg	Val	Leu	Gln	Arg	Cys	Lys	His	Pro	Phe
	50					55					60				
Leu	Thr														
65															

<210> 62  
 <211> 45  
 <212> PRT  
 <213> Caenorhabditis elegans

Lys	Leu	Glu	Asn	Leu	Leu	Leu	Asp	Lys	Asp	Gly	His	Ile	Lys	Ile	Ala
1				5					10					15	
Asp	Phe	Gly	Leu	Cys	Lys	Glu	Glu	Ile	Ser	Phe	Gly	Asp	Lys	Thr	Ser
			20					25					30		
Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val			
		35					40					45			

<210> 63  
 <211> 57  
 <212> PRT  
 <213> Caenorhabditis elegans

Tyr	Phe	Gln	Glu	Leu	Lys	Tyr	Ser	Phe	Gln	Glu	Gln	His	Tyr	Leu	Cys
1				5					10					15	
Phe	Val	Met	Gln	Phe	Ala	Asn	Gly	Gly	Glu	Leu	Phe	Thr	His	Val	Arg
			20					25					30		
Lys	Cys	Gly	Thr	Phe	Ser	Glu	Pro	Arg	Ala	Arg	Phe	Tyr	Gly	Ala	Glu
		35					40					45			
Ile	Val	Leu	Ala	Leu	Gly	Tyr	Leu	His							
	50					55									

<210> 64

<211> 59  
<212> PRT  
<213> Caenorhabditis elegans

<400> 64  
Ser Thr Phe Ala Ile Phe Tyr Phe Gln Thr Met Leu Phe Glu Lys Pro  
1 5 10 15  
Arg Pro Asn Met Phe Met Val Arg Cys Leu Gln Trp Thr Thr Val Ile  
20 25 30  
Glu Arg Thr Phe Tyr Ala Glu Ser Ala Glu Val Arg Gln Arg Trp Ile  
35 40 45  
His Ala Ile Glu Ser Ile Ser Lys Lys Tyr Lys  
50 55

<210> 65  
<211> 33  
<212> PRT  
<213> Caenorhabditis elegans

<400> 65  
Leu Gln Glu Leu Lys Tyr Ser Phe Gln Thr Asn Asp Arg Leu Cys Phe  
1 5 10 15  
Val Met Glu Phe Ala Ile Gly Gly Asp Leu Tyr Tyr His Leu Asn Arg  
20 25 30  
Glu

<210> 66  
<211> 21  
<212> PRT  
<213> Caenorhabditis elegans

<400> 66  
Val Val Ile Glu Gly Trp Leu His Lys Lys Gly Glu His Ile Arg Asn  
1 5 10 15  
Trp Arg Pro Arg Phe  
20

<210> 67  
<211> 26  
<212> PRT  
<213> Caenorhabditis elegans

<400> 67  
Phe Ser Glu Pro Arg Ala Arg Phe Tyr Gly Ser Glu Ile Val Leu Ala  
1 5 10 15  
Leu Gly Tyr Leu His Ala Asn Ser Ile Val  
20 25

<210> 68  
<211> 39  
<212> PRT  
<213> Caenorhabditis elegans

<400> 68

Ile Arg Val Ser Phe Cys Lys Gly Phe Gly Glu Thr Tyr Ser Arg Leu  
 1 5 10 15  
 Lys Val Val Asn Leu Pro Cys Trp Ile Glu Ile Ile Leu His Glu Pro  
 20 25 30  
 Ala Asp Glu Tyr Asp Thr Val  
 35

<210> 69  
 <211> 45  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 69  
 Ser Arg Asn Ser Lys Ser Ser Gln Ile Arg Asn Thr Val Gly Ala Gly  
 1 5 10 15  
 Ile Gln Leu Ala Tyr Glu Asn Gly Glu Leu Trp Leu Thr Val Leu Thr  
 20 25 30  
 Asp Gln Ile Val Phe Val Gln Cys Pro Phe Leu Asn Gln  
 35 40 45

<210> 70  
 <211> 29  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 70  
 Asn Glu Met Leu Asp Pro Glu Pro Lys Tyr Pro Lys Glu Glu Lys Pro  
 1 5 10 15  
 Trp Cys Thr Ile Phe Tyr Tyr Glu Leu Thr Val Arg Val  
 20 25

<210> 71  
 <211> 29  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 71  
 Gln Leu Gly Lys Ala Phe Glu Ala Lys Val Pro Thr Ile Thr Ile Asp  
 1 5 10 15  
 Gly Ala Thr Gly Ala Ser Asp Glu Cys Arg Met Ser Leu  
 20 25

<210> 72  
 <211> 105  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 72  
 Ser Pro Asp Asp Gly Leu Leu Asp Ser Ser Glu Glu Ser Arg Arg Arg  
 1 5 10 15  
 Gln Lys Thr Cys Arg Val Cys Gly Asp His Ala Thr Gly Tyr Asn Phe  
 20 25 30  
 Asn Val Ile Thr Cys Glu Ser Cys Lys Ala Phe Phe Arg Arg Asn Ala  
 35 40 45  
 Leu Arg Pro Lys Glu Phe Lys Cys Pro Tyr Ser Glu Asp Cys Glu Ile

50		55		60
Asn Ser Val Ser Arg Arg Phe Cys Gln Lys Cys Arg Leu Arg Lys Cys				
65		70		80
Phe Thr Val Gly Met Lys Lys Glu Trp Ile Leu Asn Glu Glu Gln Leu				
	85		90	95
Arg Arg Arg Lys Asn Ser Arg Leu Asn				
	100		105	

<210> 73  
 <211> 89  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 73

Leu Asp Ser Ser Glu Glu Ser Arg Arg Arg Gln Lys Thr Cys Arg Val	
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Cys Gly Asp His Ala Thr Gly Tyr Asn Phe Asn Val Ile Thr Cys Glu	
	20
Ser Cys Lys Ala Phe Phe Arg Arg Asn Ala Leu Arg Pro Lys Glu Phe	
	35
Lys Cys Pro Tyr Ser Glu Asp Cys Glu Ile Asn Ser Val Ser Arg Arg	
	50
Phe Cys Gln Lys Cys Arg Leu Arg Lys Cys Phe Thr Val Gly Met Lys	
65	70
Lys Glu Trp Ile Leu Asn Glu Glu Gln	
	85

<210> 74  
 <211> 73  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 74

Asp Ile Met Asn Ile Met Asp Val Thr Met Arg Arg Phe Val Lys Val	
1	5
Ala Lys Gly Val Pro Ala Phe Arg Glu Val Ser Gln Glu Gly Lys Phe	
	20
Ser Leu Leu Lys Gly Gly Met Ile Glu Met Leu Thr Val Arg Gly Val	
	35
Thr Arg Tyr Asp Ala Ser Thr Asn Ser Phe Lys Thr Pro Thr Ile Lys	
	50
Gly Gln Asn Val Ser Val Asn Val Asp	
65	70

<210> 75  
 <211> 112  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 75

Ser Gly Ser Leu Val Asp Leu Met Ile Lys Asn Leu Thr Ala Tyr Thr	
1	5
Gln Gly Leu Asn Glu Thr Val Lys Asn Arg Thr Ala Glu Leu Glu Lys	
	20
Glu Gln Glu Lys Gly Asp Gln Leu Leu Met Glu Leu Leu Pro Lys Ser	
	35
	40
	45

Val	Ala	Asn	Asp	Leu	Lys	Asn	Gly	Ile	Ala	Val	Asp	Pro	Lys	Val	Tyr
	50					55					60				
Glu	Asn	Ala	Thr	Ile	Leu	Tyr	Ser	Asp	Ile	Val	Gly	Phe	Thr	Ser	Leu
65					70					75					80
Cys	Ser	Gln	Ser	Gln	Pro	Met	Glu	Val	Val	Thr	Leu	Leu	Ser	Gly	Met
				85					90					95	
Tyr	Gln	Arg	Phe	Asp	Leu	Ile	Ile	Ser	Gln	Gln	Gly	Gly	Tyr	Lys	Val
			100					105					110		

<210> 76  
 <211> 107  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 76

Met	Glu	Thr	Ile	Gly	Asp	Ala	Tyr	Cys	Val	Ala	Ala	Gly	Leu	Pro	Val
1				5					10					15	
Val	Met	Glu	Lys	Asp	His	Val	Lys	Ser	Ile	Cys	Met	Ile	Ala	Leu	Leu
			20					25					30		
Gln	Arg	Asp	Cys	Leu	His	His	Phe	Glu	Ile	Pro	His	Arg	Pro	Gly	Thr
		35					40					45			
Phe	Leu	Asn	Cys	Arg	Trp	Gly	Phe	Asn	Ser	Gly	Pro	Val	Phe	Ala	Gly
	50					55					60				
Val	Ile	Gly	Gln	Lys	Ala	Pro	Arg	Tyr	Ala	Cys	Phe	Gly	Glu	Ala	Val
65					70					75					80
Ile	Leu	Ala	Ser	Lys	Met	Glu	Ser	Ser	Gly	Val	Glu	Asp	Arg	Ile	Gln
				85					90					95	
Met	Thr	Leu	Ala	Ser	Gln	Gln	Leu	Leu	Glu	Glu					
			100					105							

<210> 77  
 <211> 43  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 77

Asp	Ile	Leu	Lys	Gly	Leu	Glu	Tyr	Ile	His	Ala	Ser	Ala	Ile	Asp	Phe
1				5					10					15	
His	Gly	Asn	Leu	Thr	Leu	His	Asn	Cys	Met	Leu	Asp	Ser	His	Trp	Ile
			20					25					30		
Val	Lys	Leu	Ser	Gly	Phe	Gly	Val	Asn	Arg	Leu					
		35					40								

<210> 78  
 <211> 15  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 78

Asp	Met	Tyr	Ser	Phe	Gly	Val	Ile	Leu	His	Glu	Ile	Ile	Leu	Lys
1				5					10					15

<210> 79  
 <211> 67  
 <212> PRT

<213> Caenorhabditis elegans

<400> 79

Ala Ile Lys Ile Asn Val Asp Asp Pro Ala Ser Thr Glu Asn Leu Asn  
1 5 10 15  
Tyr Leu Met Glu Ala Asn Ile Met Lys Asn Phe Lys Thr Asn Phe Ile  
20 25 30  
Val Gln Leu Tyr Gly Val Ile Ser Thr Val Gln Pro Ala Met Val Val  
35 40 45  
Met Glu Met Met Asp Leu Gly Asn Leu Arg Asp Tyr Leu Arg Ser Lys  
50 55 60  
Arg Glu Asp  
65

<210> 80

<211> 54

<212> PRT

<213> Caenorhabditis elegans

<400> 80

Val Ile Lys Lys Pro Glu Cys Cys Glu Asn Tyr Trp Tyr Lys Val Met  
1 5 10 15  
Lys Met Cys Trp Arg Tyr Ser Pro Arg Asp Arg Pro Thr Phe Leu Gln  
20 25 30  
Leu Val His Leu Leu Ala Ala Glu Ala Ser Pro Glu Phe Arg Asp Leu  
35 40 45  
Ser Phe Val Leu Thr Asp  
50

<210> 81

<211> 69

<212> PRT

<213> Caenorhabditis elegans

<400> 81

Lys Gln Asp Ser Gly Met Ala Ser Glu Leu Lys Asp Ile Phe Ala Asn  
1 5 10 15  
Ile His Thr Ile Thr Gly Tyr Leu Leu Val Arg Gln Ser Ser Pro Phe  
20 25 30  
Ile Ser Leu Asn Met Phe Arg Asn Leu Arg Arg Ile Glu Ala Lys Ser  
35 40 45  
Leu Phe Arg Asn Leu Tyr Ala Ile Thr Val Phe Glu Asn Pro Asn Leu  
50 55 60  
Lys Lys Leu Phe Asp  
65

<210> 82

<211> 52

<212> PRT

<213> Caenorhabditis elegans

<400> 82

Phe Pro His Leu Arg Glu Ile Thr Gly Thr Leu Leu Val Phe Glu Thr  
1 5 10 15  
Glu Gly Leu Val Asp Leu Arg Lys Ile Phe Pro Asn Leu Arg Val Ile  
20 25 30

Gly Gly Arg Ser Leu Ile Gln His Tyr Ala Leu Ile Ile Tyr Arg Asn  
           35                  40                  45  
 Pro Asp Leu Glu  
       50

<210> 83  
 <211> 46  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 83  
 Glu Ile Gly Leu Asp Lys Leu Ser Val Ile Arg Asn Gly Gly Val Arg  
   1                  5                  10                  15  
 Ile Ile Asp Asn Arg Lys Leu Cys Tyr Thr Lys Thr Ile Asp Trp Lys  
                   20                  25                  30  
 His Leu Ile Thr Ser Ser Ile Asn Asp Val Val Val Asp Asn  
           35                  40                  45

<210> 84  
 <211> 36  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 84  
 Tyr Asn Ala Asp Asp Trp Glu Leu Arg Gln Asp Asp Val Val Leu Gly  
   1                  5                  10                  15  
 Gln Gln Cys Gly Glu Gly Ser Phe Gly Lys Val Tyr Leu Gly Thr Gly  
                   20                  25                  30  
 Asn Asn Val Val  
           35

<210> 85  
 <211> 24  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 85  
 Asp Ser Leu Ala Lys Tyr Cys Cys Val Arg Val Ser Phe Cys Lys Gly  
   1                  5                  10                  15  
 Phe Gly Glu Ala Tyr Pro Glu Arg  
           20

<210> 86  
 <211> 13  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 86  
 Gly Trp Asp Trp Ile Val Ala Pro Pro Arg Tyr Asn Ala  
   1                  5                  10

<210> 87  
 <211> 121  
 <212> PRT



<213> Homo sapiens

<400> 87

Glu	Val	Leu	Glu	Asp	Asn	Asp	Tyr	Gly	Arg	Ala	Val	Asp	Trp	Trp	Gly	
1				5					10					15		
Leu	Gly	Val	Val	Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	
			20					25					30			
Asn	Gln	Asp	His	Glu	Lys	Leu	Phe	Glu	Leu	Ile	Leu	Met	Glu	Glu	Ile	
		35					40					45				
Arg	Phe	Pro	Arg	Thr	Leu	Gly	Pro	Glu	Ala	Lys	Ser	Leu	Leu	Ser	Gly	
	50					55					60					
Leu	Leu	Lys	Lys	Asp	Pro	Thr	Gln	Arg	Leu	Gly	Gly	Gly	Ser	Glu	Asp	
65					70					75					80	
Ala	Lys	Glu	Ile	Met	Gln	His	Arg	Phe	Phe	Ala	Asn	Ile	Val	Trp	Gln	
				85					90					95		
Asp	Val	Tyr	Glu	Lys	Lys	Leu	Ser	Pro	Pro	Phe	Lys	Pro	Gln	Val	Thr	
			100					105					110			
Ser	Glu	Thr	Asp	Thr	Arg	Tyr	Phe	Asp								
			115					120								

<210> 88

<211> 121

<212> PRT

<213> Caenorhabditis elegans

<400> 88

Gln	Val	Leu	Asp	Asp	His	Asp	Tyr	Gly	Arg	Cys	Val	Asp	Trp	Trp	Gly	
1				5					10					15		
Val	Gly	Val	Val	Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	
			20					25					30			
Ser	Lys	Asp	His	Asn	Lys	Leu	Phe	Glu	Leu	Ile	Met	Ala	Gly	Asp	Leu	
		35					40					45				
Arg	Phe	Pro	Ser	Lys	Leu	Ser	Gln	Glu	Ala	Arg	Thr	Leu	Leu	Thr	Gly	
	50					55					60					
Leu	Leu	Val	Lys	Asp	Pro	Thr	Gln	Arg	Leu	Gly	Gly	Gly	Pro	Glu	Asp	
65					70					75					80	
Ala	Leu	Glu	Ile	Cys	Arg	Ala	Asp	Phe	Phe	Arg	Thr	Val	Asp	Trp	Glu	
				85					90					95		
Ala	Thr	Tyr	Arg	Lys	Glu	Ile	Glu	Pro	Pro	Tyr	Lys	Pro	Asn	Val	Gln	
			100					105					110			
Ser	Glu	Thr	Asp	Thr	Ser	Tyr	Phe	Asp								
			115					120								

<210> 89

<211> 66

<212> PRT

<213> Homo sapiens

<400> 89

Thr	Met	Asn	Glu	Phe	Glu	Tyr	Leu	Lys	Leu	Leu	Gly	Lys	Gly	Thr	Phe	
1				5					10					15		
Gly	Lys	Val	Ile	Leu	Val	Lys	Glu	Lys	Ala	Thr	Gly	Arg	Tyr	Tyr	Ala	
			20					25					30			
Met	Lys	Ile	Leu	Lys	Lys	Glu	Val	Ile	Val	Ala	Lys	Asp	Glu	Val	Ala	
		35				40						45				
His	Thr	Leu	Thr	Glu	Asn	Arg	Val	Leu	Gln	Asn	Ser	Arg	His	Pro	Phe	
	50					55					60					

Leu Thr  
65

<210> 90  
<211> 66  
<212> PRT  
<213> *Caenorhabditis elegans*

<400> 90  
Thr Met Glu Asp Phe Asp Phe Leu Lys Val Leu Gly Lys Gly Thr Phe  
1 5 10 15  
Gly Lys Val Ile Leu Cys Lys Glu Lys Arg Thr Gln Lys Leu Tyr Ala  
20 25 30  
Ile Lys Ile Leu Lys Lys Asp Val Ile Ile Ala Arg Glu Glu Val Ala  
35 40 45  
His Thr Leu Thr Glu Asn Arg Val Leu Gln Arg Cys Lys His Pro Phe  
50 55 60  
Leu Thr  
65

<210> 91  
<211> 45  
<212> PRT  
<213> *Homo sapiens*

<400> 91  
Lys Leu Glu Asn Leu Met Leu Asp Lys Asp Gly His Ile Lys Ile Thr  
1 5 10 15  
Asp Phe Gly Leu Cys Lys Glu Gly Ile Lys Asp Gly Ala Thr Met Lys  
20 25 30  
Thr Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val  
35 40 45

<210> 92  
<211> 45  
<212> PRT  
<213> *Caenorhabditis elegans*

<400> 92  
Lys Leu Glu Asn Leu Leu Leu Asp Lys Asp Gly His Ile Lys Ile Ala  
1 5 10 15  
Asp Phe Gly Leu Cys Lys Glu Glu Ile Ser Phe Gly Asp Lys Thr Ser  
20 25 30  
Thr Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val  
35 40 45

<210> 93  
<211> 57  
<212> PRT  
<213> *Homo sapiens*

<400> 93  
Phe Leu Thr Ala Leu Lys Tyr Ser Phe Gln Thr His Asp Arg Leu Cys  
1 5 10 15  
Phe Val Met Glu Tyr Ala Asn Gly Gly Glu Leu Phe Phe His Leu Ser



<400> 97

Leu	Thr	Ala	Leu	Lys	Tyr	Ser	Phe	Gln	Thr	His	Asp	Arg	Leu	Cys	Phe
1				5					10					15	
Val	Met	Glu	Tyr	Ala	Asn	Gly	Gly	Glu	Leu	Phe	Phe	His	Leu	Ser	Arg
			20					25					30		

Glu

<210> 98

<211> 33

<212> PRT

<213> Caenorhabditis elegans

<400> 98

Leu	Gln	Glu	Leu	Lys	Tyr	Ser	Phe	Gln	Thr	Asn	Asp	Arg	Leu	Cys	Phe
1				5					10					15	
Val	Met	Glu	Phe	Ala	Ile	Gly	Gly	Asp	Leu	Tyr	Tyr	His	Leu	Asn	Arg
			20					25					30		

Glu

<210> 99

<211> 36

<212> PRT

<213> Homo sapiens or Caenorhabditis elegans

<400> 99

Lys	Leu	Glu	Asn	Leu	Leu	Asp	Lys	Asp	Gly	His	Ile	Lys	Ile	Asp	Phe
1				5					10					15	
Gly	Leu	Cys	Lys	Glu	Ile	Gly	Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu
			20					25					30		

Ala Pro Glu Val  
35

<210> 100

<211> 37

<212> PRT

<213> Homo sapiens or Caenorhabditis elegans

<400> 100

Leu	Lys	Tyr	Ser	Phe	Gln	Leu	Cys	Phe	Val	Met	Ala	Asn	Gly	Gly	Glu
1				5					10					15	
Leu	Phe	His	Phe	Ser	Glu	Arg	Ala	Arg	Phe	Tyr	Gly	Ala	Glu	Ile	Val
			20					25					30		

Ala Leu Tyr Leu His  
35

<210> 101

<211> 29

<212> PRT

<213> Homo sapiens or Caenorhabditis elegans

<400> 101

Phe	Gln	Met	Glu	Pro	Arg	Pro	Asn	Phe	Arg	Cys	Leu	Gln	Trp	Thr	Thr
1				5					10					15	

Val Ile Glu Arg Thr Phe Glu Glu Arg Trp Ala Ile Lys  
 20 25

<210> 102  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens or Caenorhabditis elegans

<400> 102  
 Leu Leu Lys Tyr Ser Phe Gln Thr Asp Arg Leu Cys Phe Val Met Glu  
 1 5 10 15  
 Ala Gly Gly Leu His Leu Arg Glu  
 20

<210> 103  
 <211> 366  
 <212> PRT  
 <213> Homo sapiens

<400> 103  
 Arg Gly Ala Ile Arg Ile Glu Lys Asn Ala Asp Leu Cys Tyr Leu Ser  
 1 5 10 15  
 Thr Val Asp Trp Ser Leu Ile Leu Asp Ala Val Ser Asn Asn Tyr Ile  
 20 25 30  
 Val Gly Asn Lys Pro Pro Lys Glu Cys Gly Asp Leu Cys Pro Gly Thr  
 35 40 45  
 Met Glu Glu Lys Pro Met Cys Glu Lys Thr Thr Ile Asn Asn Glu Tyr  
 50 55 60  
 Asn Tyr Arg Cys Trp Thr Thr Asn Arg Cys Gln Lys Met Cys Pro Ser  
 65 70 75 80  
 Thr Cys Gly Lys Arg Ala Cys Thr Glu Asn Asn Glu Cys Cys His Pro  
 85 90 95  
 Glu Cys Leu Gly Ser Cys Ser Ala Pro Asp Asn Asp Thr Ala Cys Val  
 100 105 110  
 Ala Cys Arg His Tyr Tyr Tyr Ala Gly Val Cys Val Pro Ala Cys Pro  
 115 120 125  
 Pro Asn Thr Tyr Arg Phe Glu Gly Trp Arg Cys Val Asp Arg Asp Phe  
 130 135 140  
 Cys Ala Asn Ile Leu Ser Ala Glu Ser Ser Asp Ser Glu Gly Phe Val  
 145 150 155 160  
 Ile His Asp Gly Glu Cys Met Gln Glu Cys Pro Ser Gly Phe Ile Arg  
 165 170 175  
 Asn Gly Ser Gln Ser Met Tyr Cys Ile Pro Cys Glu Gly Pro Cys Pro  
 180 185 190  
 Lys Val Cys Glu Glu Glu Lys Lys Thr Lys Thr Ile Asp Ser Val Thr  
 195 200 205  
 Ser Ala Gln Met Leu Gln Gly Cys Thr Ile Phe Lys Gly Asn Leu Leu  
 210 215 220  
 Ile Asn Ile Arg Arg Gly Asn Asn Ile Ala Ser Glu Leu Glu Asn Phe  
 225 230 235 240  
 Met Gly Leu Ile Glu Val Val Thr Gly Tyr Val Lys Ile Arg His Ser  
 245 250 255  
 His Ala Leu Val Ser Leu Ser Phe Leu Lys Asn Leu Arg Leu Ile Leu  
 260 265 270  
 Gly Glu Glu Gln Leu Glu Gly Asn Tyr Ser Phe Tyr Val Leu Asp Asn  
 275 280 285  
 Gln Asn Leu Gln Gln Leu Trp Asp Trp Asp His Arg Asn Leu Thr Ile

290		295		300
Lys Ala Gly Lys Met Tyr Phe Ala Phe Asn Pro Lys Leu Cys Val Ser				
305		310		315
Glu Ile Tyr Arg Met Glu Glu Val Thr Gly Thr Lys Gly Arg Gln Ser				
	325		330	
Lys Gly Asp Ile Asn Thr Arg Asn Asn Gly Glu Arg Ala Ser Cys Glu				
	340		345	
Ser Asp Val Leu His Phe Thr Ser Thr Thr Thr Ser Lys Asn				
	355		360	365

<210> 104  
 <211> 370  
 <212> PRT  
 <213> Homo sapiens

<400> 104

Arg Gly Ser Val Arg Ile Glu Lys Asn Asn Glu Leu Cys Tyr Leu Ala	
1 5 10 15	
Thr Ile Asp Trp Ser Arg Ile Leu Asp Ser Val Glu Asp Asn Tyr Ile	
20 25 30	
Val Leu Asn Lys Asp Asp Asn Glu Glu Cys Gly Asp Ile Cys Pro Gly	
35 40 45	
Thr Ala Lys Gly Lys Thr Asn Cys Pro Ala Thr Val Ile Asn Gly Gln	
50 55 60	
Phe Val Glu Arg Cys Trp Thr His Ser His Cys Gln Lys Val Cys Pro	
65 70 75 80	
Thr Ile Cys Lys Ser His Gly Cys Thr Ala Glu Gly Leu Cys Cys His	
85 90 95	
Ser Glu Cys Leu Gly Asn Cys Ser Gln Pro Asp Asp Pro Thr Lys Cys	
100 105 110	
Val Ala Cys Arg Asn Phe Tyr Leu Asp Gly Arg Cys Val Glu Thr Cys	
115 120 125	
Pro Pro Pro Tyr Tyr His Phe Gln Asp Trp Arg Cys Val Asn Phe Ser	
130 135 140	
Phe Cys Gln Asp Leu His His Lys Cys Lys Asn Ser Arg Arg Gln Gly	
145 150 155 160	
Cys His Gln Tyr Val Ile His Asn Asn Lys Cys Ile Pro Glu Cys Pro	
165 170 175	
Ser Gly Tyr Thr Met Asn Ser Ser Asn Leu Leu Cys Thr Pro Cys Leu	
180 185 190	
Gly Pro Cys Pro Lys Val Cys His Leu Leu Glu Gly Glu Lys Thr Ile	
195 200 205	
Asp Ser Val Thr Ser Ala Gln Glu Leu Arg Gly Cys Thr Val Ile Asn	
210 215 220	
Gly Ser Leu Ile Ile Asn Ile Arg Gly Gly Asn Asn Leu Ala Ala Glu	
225 230 235 240	
Leu Glu Ala Asn Leu Gly Leu Ile Glu Glu Ile Ser Gly Tyr Leu Lys	
245 250 255	
Ile Arg Arg Ser Tyr Ala Leu Val Ser Leu Ser Phe Phe Arg Lys Leu	
260 265 270	
Arg Leu Ile Arg Gly Glu Thr Leu Glu Ile Gly Asn Tyr Ser Phe Tyr	
275 280 285	
Ala Leu Asp Asn Gln Asn Leu Arg Gln Leu Trp Asp Trp Ser Lys His	
290 295 300	
Asn Leu Thr Ile Thr Gln Gly Lys Leu Phe Phe His Tyr Asn Pro Lys	
305 310 315 320	
Leu Cys Leu Ser Glu Ile His Lys Met Glu Glu Val Ser Gly Thr Lys	
325 330 335	

Gly	Arg	Gln	Glu	Arg	Asn	Asp	Ile	Ala	Leu	Lys	Thr	Asn	Gly	Asp	Gln
			340					345					350		
Ala	Ser	Cys	Glu	Asn	Glu	Leu	Leu	Lys	Phe	Ser	Tyr	Ile	Arg	Thr	Ser
		355					360					365			
Phe	Asp														
	370														

<210> 105  
 <211> 383  
 <212> PRT  
 <213> Drosophila melanogaster

<400> 105															
Arg	Gly	Gly	Val	Arg	Ile	Glu	Lys	Asn	His	Lys	Leu	Cys	Tyr	Asp	Arg
1				5					10					15	
Thr	Ile	Asp	Trp	Leu	Glu	Ile	Leu	Ala	Glu	Asn	Glu	Ser	Gln	Leu	Val
			20					25					30		
Val	Leu	Thr	Glu	Asn	Gly	Lys	Glu	Lys	Glu	Cys	Ser	Leu	Ser	Lys	Cys
		35					40					45			
Pro	Gly	Glu	Ile	Arg	Ile	Glu	Glu	Gly	His	Asp	Asn	Thr	Ala	Ile	Glu
	50					55					60				
Gly	Glu	Leu	Asn	Ala	Ser	Cys	Gln	Leu	His	Asn	Asn	Arg	Arg	Leu	Cys
65				70						75				80	
Trp	Asn	Ser	Lys	Leu	Cys	Gln	Thr	Lys	Cys	Pro	Glu	Lys	Cys	Arg	Asn
			85						90					95	
Asn	Cys	Ile	Asp	Glu	His	Thr	Cys	Cys	Ser	Gln	Asp	Cys	Leu	Gly	Gly
			100					105					110		
Cys	Val	Ile	Asp	Lys	Asn	Gly	Asn	Glu	Ser	Cys	Ile	Ser	Cys	Arg	Asn
		115					120					125			
Val	Ser	Phe	Asn	Asn	Ile	Cys	Met	Asp	Ser	Cys	Pro	Lys	Gly	Tyr	Tyr
	130					135					140				
Gln	Phe	Asp	Ser	Arg	Cys	Val	Thr	Ala	Asn	Glu	Cys	Ile	Thr	Leu	Thr
145				150						155					160
Lys	Phe	Glu	Thr	Asn	Ser	Val	Tyr	Ser	Gly	Ile	Pro	Tyr	Asn	Gly	Gln
				165					170					175	
Cys	Ile	Thr	His	Cys	Pro	Thr	Gly	Tyr	Gln	Lys	Ser	Glu	Asn	Lys	Arg
			180					185					190		
Met	Cys	Glu	Pro	Cys	Pro	Gly	Gly	Lys	Cys	Asp	Lys	Glu	Cys	Ser	Ser
		195				200						205			
Gly	Leu	Ile	Asp	Ser	Leu	Glu	Arg	Ala	Arg	Glu	Phe	His	Gly	Cys	Thr
	210					215					220				
Ile	Ile	Thr	Gly	Thr	Glu	Pro	Leu	Thr	Ile	Ser	Ile	Lys	Arg	Glu	Ser
225					230					235					240
Gly	Ala	His	Val	Met	Asp	Glu	Leu	Lys	Tyr	Gly	Leu	Ala	Ala	Val	His
				245					250					255	
Lys	Ile	Gln	Ser	Ser	Leu	Met	Val	His	Leu	Thr	Tyr	Gly	Leu	Lys	Ser
			260					265					270		
Leu	Lys	Phe	Phe	Gln	Ser	Leu	Thr	Glu	Ile	Ser	Gly	Asp	Pro	Pro	Met
		275					280					285			
Asp	Ala	Asp	Lys	Tyr	Ala	Leu	Tyr	Val	Leu	Asp	Asn	Arg	Asp	Leu	Asp
	290					295					300				
Glu	Leu	Trp	Gly	Pro	Asn	Gln	Thr	Val	Phe	Ile	Arg	Lys	Gly	Gly	Val
305					310					315					320
Phe	Phe	His	Phe	Asn	Pro	Lys	Leu	Cys	Val	Ser	Thr	Ile	Asn	Gln	Leu
				325					330					335	
Leu	Pro	Met	Leu	Ala	Ser	Lys	Pro	Lys	Phe	Phe	Glu	Lys	Ser	Asp	Glu
			340					345					350		
Gly	Ala	Asp	Ser	Asn	Gly	Asn	Arg	Gly	Ser	Cys	Gly	Thr	Ala	Val	Leu

		355					360				365			
Asn	Val	Thr	Leu	Gln	Ser	Val	Gly	Ala	Asn	Ser	Ala	Ser	Leu	Asn
	370					375					380			

<210> 106  
 <211> 381  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 106

Asn	Gly	Gly	Val	Arg	Ile	Ile	Asp	Asn	Arg	Lys	Leu	Cys	Tyr	Thr	Lys
1				5				10						15	
Thr	Ile	Asp	Trp	Lys	His	Leu	Ile	Thr	Ser	Ser	Ile	Asn	Asp	Val	Val
			20					25					30		
Val	Asp	Asn	Ala	Ala	Glu	Tyr	Ala	Val	Thr	Glu	Thr	Gly	Leu	Met	Cys
			35				40					45			
Pro	Arg	Gly	Ala	Cys	Glu	Glu	Asp	Lys	Gly	Glu	Ser	Lys	Cys	His	Tyr
	50				55						60				
Leu	Glu	Glu	Lys	Asn	Gln	Glu	Gln	Gly	Val	Glu	Arg	Val	Gln	Ser	Cys
65					70					75					80
Trp	Ser	Asn	Thr	Thr	Cys	Gln	Lys	Ser	Cys	Ala	Tyr	Asp	Arg	Leu	Leu
				85					90					95	
Pro	Thr	Lys	Glu	Ile	Gly	Pro	Gly	Cys	Asp	Ala	Asn	Gly	Asp	Arg	Cys
			100					105					110		
His	Asp	Gln	Cys	Val	Gly	Gly	Cys	Glu	Arg	Val	Asn	Asp	Ala	Thr	Ala
		115					120					125			
Cys	His	Ala	Cys	Lys	Asn	Val	Tyr	His	Lys	Gly	Lys	Cys	Ile	Glu	Lys
	130					135						140			
Cys	Asp	Ala	His	Leu	Tyr	Leu	Leu	Leu	Gln	Arg	Arg	Cys	Val	Thr	Arg
145					150					155					160
Glu	Gln	Cys	Leu	Gln	Leu	Asn	Pro	Val	Leu	Ser	Asn	Lys	Thr	Val	Pro
				165					170					175	
Ile	Lys	Ala	Thr	Ala	Gly	Leu	Cys	Ser	Asp	Lys	Cys	Pro	Asp	Gly	Tyr
			180					185						190	
Gln	Ile	Asn	Pro	Asp	Asp	His	Arg	Glu	Cys	Arg	Lys	Cys	Val	Gly	Lys
		195					200					205			
Cys	Glu	Ile	Val	Cys	Glu	Ile	Asn	His	Val	Ile	Asp	Thr	Phe	Pro	Lys
	210					215					220				
Ala	Gln	Ala	Ile	Arg	Leu	Cys	Asn	Ile	Ile	Asp	Gly	Asn	Leu	Thr	Ile
225					230					235					240
Glu	Ile	Arg	Gly	Lys	Gln	Asp	Ser	Gly	Met	Ala	Ser	Glu	Leu	Lys	Asp
				245					250					255	
Ile	Phe	Ala	Asn	Ile	His	Thr	Ile	Thr	Gly	Tyr	Leu	Leu	Val	Arg	Gln
			260					265						270	
Ser	Ser	Pro	Phe	Ile	Ser	Leu	Asn	Met	Phe	Arg	Asn	Leu	Arg	Arg	Ile
		275					280					285			
Glu	Ala	Lys	Ser	Leu	Phe	Arg	Asn	Leu	Tyr	Ala	Ile	Thr	Val	Phe	Glu
	290					295					300				
Asn	Pro	Asn	Leu	Lys	Lys	Leu	Phe	Asp	Ser	Thr	Thr	Asp	Leu	Thr	Leu
305					310					315					320
Asp	Arg	Gly	Thr	Val	Ser	Ile	Ala	Asn	Asn	Lys	Met	Leu	Cys	Phe	Lys
				325					330					335	
Tyr	Ile	Lys	Gln	Leu	Met	Ser	Lys	Leu	Asn	Ile	Pro	Leu	Asp	Pro	Ile
			340					345					350		
Asp	Gln	Ser	Glu	Gly	Thr	Asn	Gly	Glu	Lys	Ala	Ile	Cys	Glu	Asp	Met
		355					360					365			
Ala	Ile	Asn	Val	Ser	Ile	Thr	Ala	Val	Asn	Ala	Asp	Ser			
	370					375					380				



<210> 107  
 <211> 370  
 <212> PRT  
 <213> Homo sapiens

<400> 107  
 Ala Leu Pro Val Ala Val Leu Leu Ile Val Gly Gly Leu Val Ile Met  
 1 5 10 15  
 Leu Tyr Val Phe His Arg Lys Arg Asn Asn Ser Arg Leu Gly Asn Gly  
 20 25 30  
 Val Leu Tyr Ala Ser Val Asn Pro Glu Tyr Phe Ser Ala Ala Asp Val  
 35 40 45  
 Tyr Val Pro Asp Glu Trp Glu Val Ala Arg Glu Lys Ile Thr Met Ser  
 50 55 60  
 Arg Glu Leu Gly Gln Gly Ser Phe Gly Met Val Tyr Glu Gly Val Ala  
 65 70 75 80  
 Lys Gly Val Val Lys Asp Glu Pro Glu Thr Arg Val Ala Ile Lys Thr  
 85 90 95  
 Val Asn Glu Ala Ala Ser Met Arg Glu Arg Ile Glu Phe Leu Asn Glu  
 100 105 110  
 Ala Ser Val Met Lys Glu Phe Asn Cys His His Val Val Arg Leu Leu  
 115 120 125  
 Gly Val Val Ser Gln Gly Gln Pro Thr Leu Val Ile Met Glu Leu Met  
 130 135 140  
 Thr Arg Gly Asp Leu Lys Ser Tyr Leu Arg Ser Leu Arg Pro Glu Met  
 145 150 155 160  
 Glu Asn Asn Pro Val Leu Ala Pro Pro Ser Leu Ser Lys Met Ile Gln  
 165 170 175  
 Met Ala Gly Glu Ile Ala Asp Gly Met Ala Tyr Leu Asn Ala Asn Lys  
 180 185 190  
 Phe Val His Arg Asp Leu Ala Ala Arg Asn Cys Met Val Ala Glu Asp  
 195 200 205  
 Phe Thr Val Lys Ile Gly Asp Phe Gly Met Thr Arg Asp Ile Tyr Glu  
 210 215 220  
 Thr Asp Tyr Tyr Arg Lys Gly Gly Lys Gly Leu Leu Pro Val Arg Trp  
 225 230 235 240  
 Met Ser Pro Glu Ser Leu Lys Asp Gly Val Phe Thr Thr Tyr Ser Asp  
 245 250 255  
 Val Trp Ser Phe Gly Val Val Leu Trp Glu Ile Ala Thr Leu Ala Glu  
 260 265 270  
 Gln Pro Tyr Gln Gly Leu Ser Asn Glu Gln Val Leu Arg Phe Val Met  
 275 280 285  
 Glu Gly Gly Leu Leu Asp Lys Pro Asp Asn Cys Pro Asp Met Leu Phe  
 290 295 300  
 Glu Leu Met Arg Met Cys Trp Gln Tyr Asn Pro Lys Met Arg Pro Ser  
 305 310 315 320  
 Phe Leu Glu Ile Ile Ser Ser Ile Lys Glu Glu Met Glu Pro Gly Phe  
 325 330 335  
 Arg Glu Val Ser Phe Tyr Tyr Ser Glu Glu Asn Lys Leu Pro Glu Pro  
 340 345 350  
 Glu Glu Leu Asp Leu Glu Pro Glu Asn Met Glu Ser Val Pro Leu Asp  
 355 360 365  
 Pro Ser  
 370

<210> 108  
 <211> 374

<212> PRT  
 <213> Homo sapiens

<400> 108

Ile	Gly	Pro	Leu	Ile	Phe	Val	Phe	Leu	Phe	Ser	Val	Val	Ile	Gly	Ser
1				5				10					15		
Ile	Tyr	Leu	Phe	Leu	Arg	Lys	Arg	Gln	Pro	Asp	Gly	Pro	Leu	Gly	Pro
			20					25					30		
Leu	Tyr	Ala	Ser	Ser	Asn	Pro	Glu	Tyr	Leu	Ser	Ala	Ser	Asp	Val	Phe
		35					40					45			
Pro	Cys	Ser	Val	Tyr	Val	Pro	Asp	Glu	Trp	Glu	Val	Ser	Arg	Glu	Lys
	50					55				60					
Ile	Thr	Leu	Leu	Arg	Glu	Leu	Gly	Gln	Gly	Ser	Phe	Gly	Met	Val	Tyr
65				70						75				80	
Glu	Gly	Asn	Ala	Arg	Asp	Ile	Ile	Lys	Gly	Glu	Ala	Glu	Thr	Arg	Val
				85					90					95	
Ala	Val	Lys	Thr	Val	Asn	Glu	Ser	Ala	Ser	Leu	Arg	Glu	Arg	Ile	Glu
			100					105					110		
Phe	Leu	Asn	Glu	Ala	Ser	Val	Met	Lys	Gly	Phe	Thr	Cys	His	His	Val
		115					120					125			
Val	Arg	Leu	Leu	Gly	Val	Val	Ser	Lys	Gly	Gln	Pro	Thr	Leu	Val	Val
	130					135					140				
Met	Glu	Leu	Met	Ala	His	Gly	Asp	Leu	Lys	Ser	Tyr	Leu	Arg	Ser	Leu
145					150					155					160
Arg	Pro	Glu	Ala	Glu	Asn	Asn	Pro	Gly	Arg	Pro	Pro	Pro	Thr	Leu	Gln
				165					170					175	
Glu	Met	Ile	Gln	Met	Ala	Ala	Glu	Ile	Ala	Asp	Gly	Met	Ala	Tyr	Leu
			180				185						190		
Asn	Ala	Lys	Lys	Phe	Val	His	Arg	Asp	Leu	Ala	Ala	Arg	Asn	Cys	Met
		195					200					205			
Val	Ala	His	Asp	Phe	Thr	Val	Lys	Ile	Gly	Asp	Phe	Gly	Met	Thr	Arg
	210					215					220				
Asp	Ile	Tyr	Glu	Thr	Asp	Tyr	Tyr	Arg	Lys	Gly	Gly	Lys	Gly	Leu	Leu
225					230					235				240	
Pro	Val	Arg	Trp	Met	Ala	Pro	Glu	Ser	Leu	Lys	Asp	Gly	Val	Phe	Thr
			245					250						255	
Thr	Ser	Ser	Asp	Met	Trp	Ser	Phe	Gly	Val	Val	Leu	Trp	Glu	Ile	Thr
			260					265					270		
Ser	Leu	Ala	Glu	Gln	Pro	Tyr	Gln	Gly	Leu	Ser	Asn	Glu	Gln	Val	Leu
		275					280					285			
Lys	Phe	Val	Met	Asp	Gly	Gly	Tyr	Leu	Asp	Gln	Pro	Asp	Asn	Cys	Pro
	290					295					300				
Glu	Arg	Val	Thr	Asp	Leu	Met	Arg	Met	Cys	Trp	Gln	Phe	Asn	Pro	Lys
305					310					315					320
Met	Arg	Pro	Thr	Phe	Leu	Glu	Ile	Val	Asn	Leu	Leu	Lys	Asp	Asp	Leu
			325					330						335	
His	Pro	Ser	Phe	Pro	Glu	Val	Ser	Phe	Phe	His	Ser	Glu	Glu	Asn	Lys
			340					345					350		
Ala	Pro	Glu	Ser	Glu	Glu	Leu	Glu	Met	Glu	Phe	Glu	Asp	Met	Glu	Asn
		355					360					365			
Val	Pro	Leu	Asp	Arg	Ser										
			370												

<210> 109  
 <211> 384  
 <212> PRT  
 <213> Drosophila melanogaster

<400> 109

Gly	Ile	Gly	Leu	Ala	Phe	Leu	Ile	Val	Ser	Leu	Phe	Gly	Tyr	Val	Cys
1				5					10					15	
Tyr	Leu	His	Lys	Arg	Lys	Val	Pro	Ser	Asn	Asp	Leu	His	Met	Asn	Thr
			20					25					30		
Glu	Val	Asn	Pro	Phe	Tyr	Ala	Ser	Met	Gln	Tyr	Ile	Pro	Asp	Asp	Trp
		35					40					45			
Glu	Val	Leu	Arg	Glu	Asn	Ile	Ile	Gln	Leu	Ala	Pro	Leu	Gly	Gln	Gly
	50					55					60				
Ser	Phe	Gly	Met	Val	Tyr	Glu	Gly	Ile	Leu	Lys	Ser	Phe	Pro	Pro	Asn
65					70					75					80
Gly	Val	Asp	Arg	Glu	Cys	Ala	Ile	Lys	Thr	Val	Asn	Glu	Asn	Ala	Thr
			85						90					95	
Asp	Arg	Glu	Arg	Thr	Asn	Phe	Leu	Ser	Glu	Ala	Ser	Val	Met	Lys	Glu
			100					105					110		
Phe	Asp	Thr	Tyr	His	Val	Val	Arg	Leu	Leu	Gly	Val	Cys	Ser	Arg	Gly
		115					120					125			
Gln	Pro	Ala	Leu	Val	Val	Met	Glu	Leu	Met	Lys	Lys	Gly	Asp	Leu	Lys
	130					135					140				
Ser	Tyr	Leu	Arg	Ala	His	Arg	Pro	Glu	Glu	Arg	Asp	Glu	Ala	Met	Met
145					150					155					160
Thr	Tyr	Leu	Asn	Arg	Ile	Gly	Val	Thr	Gly	Asn	Val	Gln	Pro	Pro	Thr
			165						170					175	
Tyr	Gly	Arg	Ile	Tyr	Gln	Met	Ala	Ile	Glu	Ile	Ala	Asp	Gly	Met	Ala
			180					185					190		
Tyr	Leu	Ala	Ala	Lys	Lys	Phe	Val	His	Arg	Asp	Leu	Ala	Ala	Arg	Asn
		195					200					205			
Cys	Met	Val	Ala	Asp	Asp	Leu	Thr	Val	Lys	Ile	Gly	Asp	Phe	Gly	Met
	210					215					220				
Thr	Arg	Asp	Ile	Tyr	Glu	Thr	Asp	Tyr	Tyr	Arg	Lys	Gly	Thr	Lys	Gly
225					230					235					240
Leu	Leu	Pro	Val	Arg	Trp	Met	Pro	Pro	Glu	Ser	Leu	Arg	Asp	Gly	Val
			245						250					255	
Tyr	Ser	Ser	Ala	Ser	Asp	Val	Phe	Ser	Phe	Gly	Val	Val	Leu	Trp	Glu
			260					265					270		
Met	Ala	Thr	Leu	Ala	Ala	Gln	Pro	Tyr	Gln	Gly	Leu	Ser	Asn	Glu	Gln
		275					280					285			
Val	Leu	Arg	Tyr	Val	Ile	Asp	Gly	Gly	Val	Met	Glu	Arg	Pro	Glu	Asn
	290					295					300				
Cys	Pro	Asp	Phe	Leu	His	Lys	Leu	Met	Gln	Arg	Cys	Trp	His	His	Arg
305					310				315						320
Ser	Ser	Ala	Arg	Pro	Ser	Phe	Leu	Asp	Ile	Ile	Ala	Tyr	Leu	Glu	Pro
			325						330					335	
Gln	Cys	Pro	Asn	Ser	Gln	Phe	Lys	Glu	Val	Ser	Phe	Tyr	His	Ser	Glu
			340					345					350		
Ala	Gly	Leu	Gln	His	Arg	Glu	Lys	Glu	Arg	Lys	Glu	Arg	Asn	Gln	Leu
		355					360					365			
Asp	Ala	Phe	Ala	Ala	Val	Pro	Leu	Asp	Gln	Asp	Leu	Gln	Asp	Arg	Glu
	370					375					380				

<210> 110

<211> 380

<212> PRT

<213> Caenorhabditis elegans

<400> 110

Gly	Met	Leu	Leu	Val	Phe	Leu	Ile	Leu	Met	Ser	Ile	Ala	Gly	Cys	Ile
1				5					10					15	

Ile	Tyr	Tyr	Tyr	Ile	Gln	Val	Arg	Tyr	Gly	Lys	Lys	Val	Lys	Ala	Leu
			20					25					30		
Ser	Asp	Phe	Met	Gln	Leu	Asn	Pro	Glu	Tyr	Cys	Val	Asp	Asn	Lys	Tyr
		35					40					45			
Asn	Ala	Asp	Asp	Trp	Glu	Leu	Arg	Gln	Asp	Asp	Val	Val	Leu	Gly	Gln
	50					55					60				
Gln	Cys	Gly	Glu	Gly	Ser	Phe	Gly	Lys	Val	Tyr	Leu	Gly	Thr	Gly	Asn
65					70					75					80
Asn	Val	Val	Ser	Leu	Met	Gly	Asp	Arg	Phe	Gly	Pro	Cys	Ala	Ile	Lys
				85					90					95	
Ile	Asn	Val	Asp	Asp	Pro	Ala	Ser	Thr	Glu	Asn	Leu	Asn	Tyr	Leu	Met
			100					105					110		
Glu	Ala	Asn	Ile	Met	Lys	Asn	Phe	Lys	Thr	Asn	Phe	Ile	Val	Gln	Leu
		115					120					125			
Tyr	Gly	Val	Ile	Ser	Thr	Val	Gln	Pro	Ala	Met	Val	Val	Met	Glu	Met
	130					135					140				
Met	Asp	Leu	Gly	Asn	Leu	Arg	Asp	Tyr	Leu	Arg	Ser	Lys	Arg	Glu	Asp
145					150				155						160
Glu	Val	Phe	Asn	Glu	Thr	Asp	Cys	Asn	Phe	Phe	Asp	Ile	Ile	Pro	Arg
				165					170					175	
Asp	Lys	Phe	His	Glu	Trp	Ala	Ala	Gln	Ile	Cys	Asp	Gly	Met	Ala	Tyr
			180					185					190		
Leu	Glu	Ser	Leu	Lys	Phe	Cys	His	Arg	Asp	Leu	Ala	Ala	Arg	Asn	Cys
		195					200					205			
Met	Ile	Asn	Arg	Asp	Glu	Thr	Val	Lys	Ile	Gly	Asp	Phe	Gly	Met	Ala
	210					215					220				
Arg	Asp	Leu	Phe	Tyr	His	Asp	Tyr	Tyr	Lys	Pro	Ser	Gly	Lys	Arg	Met
225					230					235					240
Met	Pro	Val	Arg	Trp	Met	Ser	Pro	Glu	Ser	Leu	Lys	Asp	Gly	Lys	Phe
				245				250						255	
Asp	Ser	Lys	Ser	Asp	Val	Trp	Ser	Phe	Gly	Val	Val	Leu	Tyr	Glu	Met
			260					265					270		
Val	Thr	Leu	Gly	Ala	Gln	Pro	Tyr	Ile	Gly	Leu	Ser	Asn	Asp	Glu	Val
		275					280					285			
Leu	Asn	Tyr	Ile	Gly	Met	Ala	Arg	Lys	Val	Ile	Lys	Lys	Pro	Glu	Cys
	290					295					300				
Cys	Glu	Asn	Tyr	Trp	Tyr	Lys	Val	Met	Lys	Met	Cys	Trp	Arg	Tyr	Ser
305					310					315					320
Pro	Arg	Asp	Arg	Pro	Thr	Phe	Leu	Gln	Leu	Val	His	Leu	Leu	Ala	Ala
				325					330					335	
Glu	Ala	Ser	Pro	Glu	Phe	Arg	Asp	Leu	Ser	Phe	Val	Leu	Thr	Asp	Asn
			340					345					350		
Gln	Met	Ile	Leu	Asp	Asp	Ser	Glu	Ala	Leu	Asp	Leu	Asp	Asp	Ile	Asp
		355					360					365			
Asp	Thr	Asp	Met	Asn	Asp	Gln	Val	Val	Glu	Val	Ala				
	370					375					380				

<210> 111

<211> 103

<212> PRT

<213> Caenorhabditis elegans

<400> 111

Asn	Ile	Asp	Arg	Glu	Phe	Asp	Gln	Lys	Ala	Cys	Glu	Ser	Leu	Val	Lys
1				5				10					15		
Lys	Leu	Lys	Asp	Lys	Lys	Asn	Asp	Leu	Gln	Asn	Leu	Ile	Asp	Val	Val
			20					25				30			
Leu	Ser	Lys	Gly	Thr	Lys	Tyr	Thr	Gly	Cys	Ile	Thr	Ile	Pro	Arg	Thr

	35					40					45						
Leu	Asp	Gly	Arg	Leu	Gln	Val	His	Gly	Arg	Lys	Gly	Phe	Pro	His	Val		
	50					55					60						
Val	Tyr	Gly	Lys	Leu	Trp	Arg	Phe	Asn	Glu	Met	Thr	Lys	Asn	Glu	Thr		
65					70					75					80		
Arg	His	Val	Asp	His	Cys	Lys	His	Ala	Phe	Glu	Met	Lys	Ser	Asp	Met		
			85						90					95			
Val	Cys	Val	Asn	Pro	Tyr	His											
			100														

<210> 112  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 112																	
Gly	Gly	Glu	Ser	Glu	Thr	Phe	Ala	Lys	Arg	Ala	Ile	Glu	Ser	Leu	Val		
1				5					10					15			
Lys	Lys	Leu	Lys	Glu	Lys	Lys	Asp	Glu	Leu	Asp	Ser	Leu	Ile	Thr	Ala		
			20					25					30				
Ile	Thr	Thr	Asn	Gly	Ala	His	Pro	Ser	Lys	Cys	Val	Thr	Ile	Gln	Arg		
		35				40						45					
Thr	Leu	Asp	Gly	Arg	Leu	Gln	Val	Ala	Gly	Arg	Lys	Gly	Phe	Pro	His		
	50					55					60						
Val	Ile	Tyr	Ala	Arg	Leu	Trp	Arg	Trp	Pro	Asp	Leu	His	Lys	Asn	Glu		
65					70					75					80		
Leu	Lys	His	Val	Lys	Tyr	Cys	Gln	Tyr	Ala	Phe	Asp	Leu	Lys	Cys	Asp		
			85						90					95			
Ser	Val	Cys	Val	Asn	Pro	Tyr	His										
			100														

<210> 113  
 <211> 205  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 113																	
Ile	Val	Tyr	Tyr	Glu	Lys	Asn	Leu	Gln	Ile	Gly	Glu	Lys	Lys	Cys	Ser		
1				5					10					15			
Arg	Gly	Asn	Phe	His	Val	Asp	Gly	Gly	Phe	Ile	Cys	Ser	Glu	Asn	Arg		
		20						25					30				
Tyr	Ser	Leu	Gly	Leu	Glu	Pro	Asn	Pro	Ile	Arg	Glu	Pro	Val	Ala	Phe		
		35				40						45					
Lys	Val	Arg	Lys	Ala	Ile	Val	Asp	Gly	Ile	Arg	Phe	Ser	Tyr	Lys	Lys		
	50					55					60						
Asp	Gly	Ser	Val	Trp	Leu	Gln	Asn	Arg	Met	Lys	Tyr	Pro	Val	Phe	Val		
65					70					75					80		
Thr	Ser	Gly	Tyr	Leu	Asp	Glu	Gln	Ser	Gly	Gly	Leu	Lys	Lys	Asp	Lys		
			85					90						95			
Val	His	Lys	Val	Tyr	Gly	Cys	Ala	Ser	Ile	Lys	Thr	Phe	Gly	Phe	Asn		
			100					105					110				
Val	Ser	Lys	Gln	Ile	Ile	Arg	Asp	Ala	Leu	Leu	Ser	Lys	Gln	Met	Ala		
		115					120						125				
Thr	Met	Tyr	Leu	Gln	Gly	Lys	Leu	Thr	Pro	Met	Asn	Tyr	Ile	Tyr	Glu		
	130					135					140						
Lys	Lys	Thr	Gln	Glu	Glu	Leu	Arg	Arg	Glu	Ala	Thr	Arg	Thr	Thr	Asp		
145					150					155					160		

Ser	Leu	Ala	Lys	Tyr	Cys	Cys	Val	Arg	Val	Ser	Phe	Cys	Lys	Gly	Phe
				165					170					175	
Gly	Glu	Ala	Tyr	Pro	Glu	Arg	Pro	Ser	Ile	His	Asp	Cys	Pro	Val	Trp
			180					185					190		
Ile	Glu	Leu	Lys	Ile	Asn	Ile	Ala	Tyr	Asp	Phe	Met	Asp			
		195					200					205			

<210> 114  
 <211> 212  
 <212> PRT  
 <213> Homo sapiens

<400> 114

Ile	Ala	Tyr	Phe	Glu	Met	Asp	Val	Gln	Val	Gly	Glu	Thr	Phe	Lys	Val
1				5					10					15	
Pro	Ser	Ser	Cys	Pro	Ile	Val	Thr	Val	Asp	Gly	Tyr	Val	Asp	Pro	Ser
			20					25					30		
Gly	Gly	Asp	Arg	Phe	Cys	Leu	Gly	Gln	Leu	Ser	Asn	Val	His	Arg	Thr
		35					40					45			
Glu	Ala	Ile	Glu	Arg	Ala	Arg	Leu	His	Ile	Gly	Lys	Gly	Val	Gln	Leu
	50					55					60				
Glu	Cys	Lys	Gly	Glu	Gly	Asp	Val	Trp	Val	Arg	Cys	Leu	Ser	Asp	His
65					70				75					80	
Ala	Val	Phe	Val	Gln	Ser	Tyr	Tyr	Leu	Asp	Arg	Glu	Ala	Gly	Arg	Ala
				85					90					95	
Pro	Gly	Asp	Ala	Val	His	Lys	Ile	Tyr	Pro	Ser	Ala	Tyr	Ile	Lys	Val
			100					105					110		
Phe	Asp	Leu	Arg	Gln	Cys	His	Arg	Gln	Met	Gln	Gln	Gln	Ala	Ala	Thr
		115					120					125			
Ala	Gln	Ala	Ala	Ala	Ala	Ala	Gln	Ala	Ala	Ala	Val	Ala	Gly	Asn	Ile
	130					135					140				
Pro	Gly	Pro	Gly	Ser	Val	Gly	Gly	Ile	Ala	Pro	Ala	Ile	Ser	Leu	Ser
145					150					155					160
Ala	Ala	Ala	Gly	Ile	Gly	Val	Asp	Asp	Leu	Arg	Arg	Leu	Cys	Ile	Leu
				165					170					175	
Arg	Met	Ser	Phe	Val	Lys	Gly	Trp	Gly	Pro	Asp	Tyr	Pro	Arg	Gln	Ser
			180					185					190		
Ile	Lys	Glu	Thr	Pro	Cys	Trp	Ile	Glu	Ile	His	Leu	His	Arg	Ala	Leu
		195					200					205			
Gln	Leu	Leu	Asp												
			210												

<210> 115  
 <211> 50  
 <212> PRT  
 <213> Caenorhabditis elegans

<220>  
 <221> VARIANT  
 <222> (1)...(50)  
 <223> Xaa = Any Amino Acid

<400> 115

Leu	Cys	Gly	Xaa	Xaa	Leu	Val	Glu	Ala	Leu	Xaa	Xaa	Val	Cys	Gly	Xaa
1				5					10					15	
Arg	Gly	Phe	Phe	Tyr	Thr	Pro	Lys	Thr	Arg	Arg	Lys	Arg	Gly	Ile	Val
			20					25					30		

Glu Gln Cys Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Gln Leu Glu Xaa Tyr  
                   35                  40                  45  
 Cys Asn  
           50

<210> 116  
 <211> 39  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 116  
 Leu Cys Gly Arg His Leu Ala Asp Ala Leu Tyr Phe Val Cys Gly Asn  
   1                  5                  10                  15  
 Arg Gly Phe Gly Ile Val Glu Glu Cys Cys His Asn Pro Cys Thr Leu  
                   20                  25                  30  
 Tyr Gln Leu Glu Asn Tyr Cys  
           35

<210> 117  
 <211> 112  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 117  
 Met Asn Ser Val Phe Thr Ile Ile Phe Val Leu Cys Ala Leu Gln Val  
   1                  5                  10                  15  
 Ala Ala Ser Phe Arg Gln Ser Phe Gly Pro Ser Met Ser Glu Glu Ser  
                   20                  25                  30  
 Ala Ser Met Gln Leu Leu Arg Glu Leu Gln His Asn Met Met Glu Ser  
                   35                  40                  45  
 Ala His Arg Pro Met Pro Arg Ala Arg Arg Val Pro Ala Pro Gly Glu  
   50                  55                  60  
 Thr Arg Ala Cys Gly Arg Lys Leu Ile Ser Leu Val Met Ala Val Cys  
  65                  70                  75                  80  
 Gly Asp Leu Cys Asn Pro Gln Glu Gly Lys Asp Ile Ala Thr Glu Cys  
                   85                  90                  95  
 Cys Gly Asn Gln Cys Ser Asp Asp Tyr Ile Arg Ser Ala Cys Cys Pro  
                  100                 105                 110

<210> 118  
 <211> 106  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 118  
 Met Phe Ser Phe Phe Thr Tyr Phe Leu Leu Ser Ala Leu Leu Leu Ser  
   1                  5                  10                  15  
 Ala Ser Cys Arg Gln Pro Ser Met Asp Thr Ser Lys Ala Asp Arg Ile  
                   20                  25                  30  
 Leu Arg Glu Ile Glu Met Glu Thr Glu Leu Glu Asn Gln Leu Ser Arg  
                   35                  40                  45  
 Ala Arg Arg Val Pro Ala Gly Glu Val Arg Ala Cys Gly Arg Arg Leu  
   50                  55                  60  
 Leu Leu Phe Val Trp Ser Thr Cys Gly Glu Pro Cys Thr Pro Gln Glu  
  65                  70                  75                  80  
 Asp Met Asp Ile Ala Thr Val Cys Cys Thr Thr Gln Cys Thr Pro Ser

				85					90				95
Tyr	Ile	Lys	Gln	Ala	Cys	Cys	Pro	Glu	Lys				
			100					105					

<210> 119  
 <211> 105  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 119

Met	Pro	Pro	Ile	Ile	Leu	Val	Phe	Phe	Leu	Val	Leu	Ile	Pro	Ala	Ser
1				5					10					15	
Gln	Gln	Tyr	Pro	Phe	Ser	Leu	Glu	Ser	Leu	Asn	Asp	Gln	Ile	Ile	Asn
			20					25					30		
Glu	Glu	Val	Ile	Glu	Tyr	Met	Leu	Glu	Asn	Ser	Ile	Arg	Ser	Ser	Arg
		35					40					45			
Thr	Arg	Arg	Val	Pro	Asp	Glu	Lys	Lys	Ile	Tyr	Arg	Cys	Gly	Arg	Arg
	50					55					60				
Ile	His	Ser	Tyr	Val	Phe	Ala	Val	Cys	Gly	Lys	Ala	Cys	Glu	Ser	Asn
65					70					75					80
Thr	Glu	Val	Asn	Ile	Ala	Ser	Lys	Cys	Cys	Arg	Glu	Glu	Cys	Thr	Asp
			85						90					95	
Asp	Phe	Ile	Arg	Lys	Gln	Cys	Cys	Pro							
			100					105							

<210> 120  
 <211> 118  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 120

Met	Ile	Val	Thr	Leu	Ile	Val	Phe	Leu	Val	Ile	Gly	Leu	Gln	Met	Ala
1				5					10					15	
His	Leu	Ser	Gln	Val	Ser	Gly	Asn	Asn	Glu	Asn	Gly	Phe	Leu	Asn	Pro
			20					25					30		
Phe	Asp	Leu	Ser	Gln	Trp	Ser	Glu	Glu	Ile	Leu	His	Arg	Gln	Tyr	His
		35					40					45			
His	His	His	His	His	His	His	Gly	Asn	Arg	Ala	Arg	Arg	Thr	Leu	Glu
	50					55					60				
Thr	Glu	Lys	Ile	Tyr	Arg	Cys	Gly	Arg	Lys	Leu	Tyr	Thr	Asp	Val	Leu
65					70					75					80
Ser	Ala	Cys	Asn	Gly	Pro	Cys	Glu	Pro	Gly	Thr	Glu	Gln	Asp	Leu	Ser
			85						90					95	
Lys	Leu	Cys	Cys	Gly	Asn	Gln	Cys	Thr	Phe	Val	Glu	Ile	Arg	Lys	Ala
			100					105					110		
Cys	Cys	Ala	Asp	Lys	Leu										
			115												

<210> 121  
 <211> 106  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 121

Met	Asn	Ala	Ile	Ile	Phe	Cys	Leu	Leu	Phe	Thr	Thr	Val	Thr	Ala	Thr
1				5					10					15	



Tyr	Glu	Val	Phe	Gly	Lys	Gly	Ile	Glu	His	Arg	Asn	Glu	His	Leu	Ile
			20					25					30		
Ile	Asn	Gln	Leu	Asp	Ile	Ile	Pro	Val	Glu	Ser	Thr	Pro	Thr	Pro	Asn
		35					40					45			
Arg	Ala	Ser	Arg	Val	Gln	Lys	Arg	Leu	Cys	Gly	Arg	Arg	Leu	Ile	Leu
	50					55					60				
Phe	Met	Leu	Ala	Thr	Cys	Gly	Glu	Cys	Asp	Thr	Asp	Ser	Ser	Glu	Asp
65					70					75					80
Leu	Ser	His	Ile	Cys	Cys	Ile	Lys	Gln	Cys	Asp	Val	Gln	Asp	Ile	Ile
				85					90					95	
Arg	Val	Cys	Cys	Pro	Asn	Ser	Phe	Arg	Lys						
			100					105							

<210> 122  
 <211> 107  
 <212> PRT  
 <213> Caenorhabditis elegans

Met	Lys	Leu	Ser	Val	Val	Leu	Ala	Leu	Phe	Ile	Ile	Phe	Gln	Leu	Gly
1				5					10					15	
Ala	Ala	Ser	Leu	Met	Arg	Asn	Trp	Met	Phe	Asp	Phe	Glu	Lys	Glu	Leu
			20					25					30		
Glu	His	Asp	Tyr	Asp	Asp	Ser	Glu	Ile	Gly	Phe	His	Asn	Ile	His	Ser
		35					40					45			
Leu	Met	Ala	Arg	Ser	Arg	Arg	Gly	Asp	Lys	Val	Lys	Ile	Cys	Gly	Thr
	50					55					60				
Lys	Val	Leu	Lys	Met	Val	Met	Val	Met	Cys	Gly	Gly	Glu	Cys	Ser	Ser
65				70					75						80
Thr	Asn	Glu	Asn	Ile	Ala	Thr	Glu	Cys	Cys	Glu	Lys	Met	Cys	Thr	Met
				85					90					95	
Glu	Asp	Ile	Thr	Thr	Lys	Cys	Cys	Pro	Ser	Arg					
			100					105							

<210> 123  
 <211> 73  
 <212> PRT  
 <213> Caenorhabditis elegans

Met	Lys	Leu	Leu	His	Ile	Phe	Ile	Ile	Phe	Leu	Leu	Phe	Gln	Ser	Cys
1				5					10					15	
Ser	Asn	Lys	Met	Cys	Gln	Tyr	Ser	Lys	Lys	Lys	Tyr	Lys	Ile	Cys	Gly
			20					25					30		
Val	Arg	Ala	Leu	Lys	His	Met	Lys	Val	Tyr	Cys	Thr	Arg	Gly	Met	Thr
		35					40					45			
Arg	Asp	Tyr	Gly	Lys	Leu	Leu	Val	Thr	Cys	Cys	Ser	Lys	Gly	Cys	Asn
	50					55					60				
Ala	Ile	Asp	Ile	Gln	Arg	Ile	Cys	Leu							
65					70										

<210> 124  
 <211> 109  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 124

Met	Tyr	Trp	Phe	Arg	Gln	Val	Tyr	Arg	Pro	Ser	Phe	Phe	Phe	Gly	Phe
1				5				10						15	
Leu	Ala	Ile	Leu	Leu	Leu	Ser	Ser	Pro	Thr	Pro	Ser	Asp	Ala	Ser	Ile
			20					25					30		
Arg	Leu	Cys	Gly	Ser	Arg	Leu	Thr	Thr	Thr	Leu	Leu	Ala	Val	Cys	Arg
		35					40					45			
Asn	Gln	Leu	Cys	Thr	Gly	Leu	Thr	Ala	Phe	Lys	Arg	Ser	Ala	Asp	Gln
	50					55					60				
Ser	Tyr	Ala	Pro	Thr	Thr	Arg	Asp	Leu	Phe	His	Ile	His	His	Gln	Gln
65					70					75					80
Lys	Arg	Gly	Gly	Ile	Ala	Thr	Glu	Cys	Cys	Glu	Lys	Arg	Cys	Ser	Phe
				85				90						95	
Ala	Tyr	Leu	Lys	Thr	Phe	Cys	Cys	Asn	Gln	Asp	Asp	Asn			
			100					105							

<210> 125

<211> 110

<212> PRT

<213> Homo sapiens

<400> 125

Met	Ala	Leu	Trp	Met	Arg	Leu	Leu	Pro	Leu	Leu	Ala	Leu	Leu	Ala	Leu
1				5				10						15	
Trp	Gly	Pro	Asp	Pro	Ala	Ala	Ala	Phe	Val	Asn	Gln	His	Leu	Cys	Gly
			20					25					30		
Ser	His	Leu	Val	Glu	Ala	Leu	Tyr	Leu	Val	Cys	Gly	Glu	Arg	Gly	Phe
		35					40					45			
Phe	Tyr	Thr	Pro	Lys	Thr	Arg	Arg	Glu	Ala	Glu	Asp	Leu	Gln	Val	Gly
	50					55					60				
Gln	Val	Glu	Leu	Gly	Gly	Gly	Pro	Gly	Ala	Gly	Ser	Leu	Gln	Pro	Leu
65					70					75					80
Ala	Leu	Glu	Gly	Ser	Leu	Gln	Lys	Arg	Gly	Ile	Val	Glu	Gln	Cys	Cys
				85				90						95	
Thr	Ser	Ile	Cys	Ser	Leu	Tyr	Gln	Leu	Glu	Asn	Tyr	Cys	Asn		
			100					105					110		

<210> 126

<211> 46

<212> PRT

<213> Caenorhabditis elegans

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 126

Ala	Cys	Gly	Arg	Arg	Leu	Leu	Leu	Phe	Val	Trp	Ser	Thr	Cys	Gly	Glu
1				5				10						15	
Pro	Cys	Thr	Xaa	Xaa	Xaa	Gln	Glu	Asp	Met	Asp	Ile	Ala	Thr	Val	Cys
			20					25					30		
Cys	Thr	Thr	Gln	Cys	Thr	Pro	Ser	Tyr	Ile	Lys	Gln	Ala	Cys		
		35					40					45			

<210> 127

<211> 46  
<212> PRT  
<213> Caenorhabditis elegans

<220>  
<221> VARIANT  
<222> (1)...(46)  
<223> Xaa = Any Amino Acid

<400> 127  
Ala Cys Gly Arg Lys Leu Ile Ser Leu Val Met Ala Val Cys Gly Asp  
1 5 10 15  
Leu Cys Asn Xaa Xaa Xaa Gln Glu Gly Lys Asp Ile Ala Thr Glu Cys  
20 25 30  
Cys Gly Asn Gln Cys Ser Asp Asp Tyr Ile Arg Ser Ala Cys  
35 40 45

<210> 128  
<211> 46  
<212> PRT  
<213> Caenorhabditis elegans

<220>  
<221> VARIANT  
<222> (1)...(46)  
<223> Xaa = Any Amino Acid

<400> 128  
Arg Cys Gly Arg Arg Ile His Ser Tyr Val Phe Ala Val Cys Gly Lys  
1 5 10 15  
Ala Cys Glu Xaa Xaa Xaa Ser Thr Glu Val Asn Ile Ala Ser Lys Cys  
20 25 30  
Cys Arg Glu Glu Cys Thr Asp Asp Phe Ile Arg Lys Gln Cys  
35 40 45

<210> 129  
<211> 46  
<212> PRT  
<213> Caenorhabditis elegans

<220>  
<221> VARIANT  
<222> (1)...(46)  
<223> Xaa = Any Amino Acid

<400> 129  
Arg Cys Gly Arg Lys Leu Tyr Thr Asp Val Leu Ser Ala Cys Asn Gly  
1 5 10 15  
Pro Cys Glu Xaa Xaa Xaa Gly Thr Glu Gln Asp Leu Ser Lys Leu Cys  
20 25 30  
Cys Gly Asn Gln Cys Thr Phe Asx Glu Ile Arg Lys Ala Cys  
35 40 45

<210> 130  
<211> 46  
<212> PRT

<213> Caenorhabditis elegans

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 130

Ile	Cys	Gly	Thr	Lys	Asx	Leu	Lys	Met	Val	Met	Val	Met	Cys	Gly	Gly	
1				5				10						15		
Glu	Cys	Ser	Xaa	Xaa	Xaa	Ser	Thr	Asn	Glu	Asn	Ile	Ala	Thr	Glu	Cys	
			20					25					30			
Cys	Glu	Lys	Met	Cys	Thr	Met	Glu	Asp	Ile	Thr	Thr	Lys	Cys			
		35					40					45				

<210> 131

<211> 46

<212> PRT

<213> Caenorhabditis elegans

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 131

Leu	Cys	Gly	Arg	Arg	Leu	Ile	Leu	Phe	Met	Leu	Ala	Thr	Cys	Gly	Glu	
1				5				10						15		
Cys	Asp	Thr	Xaa	Xaa	Xaa	Asp	Ser	Ser	Glu	Asp	Leu	Ser	His	Ile	Cys	
			20					25					30			
Cys	Ile	Lys	Gln	Cys	Asp	Val	Gln	Asp	Ile	Ile	Arg	Val	Cys			
		35					40					45				

<210> 132

<211> 46

<212> PRT

<213> Caenorhabditis elegans

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 132

Leu	Cys	Gly	Ser	His	Leu	Val	Glu	Ala	Leu	Tyr	Leu	Val	Cys	Gly	Glu	
1				5				10						15		
Arg	Gly	Phe	Xaa	Xaa	Xaa	Leu	Gln	Lys	Arg	Gly	Ile	Val	Glu	Gln	Cys	
			20					25					30			
Cys	Thr	Ser	Ile	Cys	Ser	Leu	Tyr	Gln	Leu	Glu	Asn	Tyr	Cys			
		35					40					45				

<210> 133

<211> 46

<212> PRT

<213> Rabbit

<220>  
 <221> VARIANT  
 <222> (1)...(46)  
 <223> Xaa = Any Amino Acid  
  
 <400> 133  
 Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Glu  
 1 5 10 15  
 Arg Gly Phe Xaa Xaa Xaa Thr Pro Lys Ser Gly Ile Val Glu Gln Cys  
 20 25 30  
 Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys  
 35 40 45

<210> 134  
 <211> 46  
 <212> PRT  
 <213> Xenopus laevis

<220>  
 <221> VARIANT  
 <222> (1)...(46)  
 <223> Xaa = Any Amino Acid  
  
 <400> 134  
 Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Asp  
 1 5 10 15  
 Arg Gly Phe Xaa Xaa Xaa Lys Met Lys Arg Gly Ile Val Glu Gln Cys  
 20 25 30  
 Cys His Ser Thr Cys Ser Leu Phe Gln Leu Glu Ser Tyr Cys  
 35 40 45

<210> 135  
 <211> 46  
 <212> PRT  
 <213> Xenopus laevis

<220>  
 <221> VARIANT  
 <222> (1)...(46)  
 <223> Xaa = Any Amino Acid  
  
 <400> 135  
 Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Asp  
 1 5 10 15  
 Arg Gly Phe Xaa Xaa Xaa Lys Met Lys Arg Gly Ile Val Glu Gln Cys  
 20 25 30  
 Cys His Ser Thr Cys Ser Leu Phe Gln Leu Glu Asn Tyr Cys  
 35 40 45

<210> 136  
 <211> 46  
 <212> PRT  
 <213> Alligator

<220>  
 <221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 136

Leu	Cys	Gly	Ser	His	Leu	Val	Asp	Ala	Leu	Tyr	Leu	Val	Cys	Gly	Glu
1				5					10					15	
Arg	Gly	Phe	Xaa	Xaa	Xaa	Ser	Pro	Lys	Gly	Gly	Ile	Val	Glu	Gln	Cys
			20					25					30		
Cys	His	Asn	Thr	Cys	Ser	Leu	Tyr	Gln	Leu	Glu	Asn	Tyr	Cys		
		35					40					45			

<210> 137

<211> 46

<212> PRT

<213> Elephant fish

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 137

Leu	Cys	Gly	Ser	His	Leu	Val	Asp	Ala	Leu	Tyr	Phe	Val	Cys	Gly	Glu
1				5					10					15	
Arg	Gly	Phe	Xaa	Xaa	Xaa	Pro	Lys	Gln	Ile	Gly	Ile	Val	Glu	Gln	Cys
			20					25					30		
Cys	His	Asn	Thr	Cys	Ser	Leu	Val	Asn	Leu	Glu	Gly	Tyr	Cys		
		35					40					45			

<210> 138

<211> 46

<212> PRT

<213> Bos taurus

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 138

Leu	Cys	Gly	Ala	Glu	Leu	Val	Asp	Ala	Leu	Gln	Phe	Val	Cys	Gly	Asp
1				5					10					15	
Arg	Gly	Phe	Xaa	Xaa	Xaa	Ala	Pro	Gln	Thr	Gly	Ile	Val	Asp	Glu	Cys
			20					25					30		
Cys	Phe	Arg	Ser	Cys	Asp	Leu	Arg	Arg	Leu	Glu	Met	Tyr	Cys		
		35					40					45			

<210> 139

<211> 46

<212> PRT

<213> Canis

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 139

Leu	Cys	Gly	Ala	Glu	Leu	Val	Asp	Ala	Leu	Gln	Phe	Val	Cys	Gly	Asp
1				5					10					15	
Arg	Gly	Phe	Xaa	Xaa	Xaa	Ala	Pro	Gln	Thr	Gly	Ile	Val	Asp	Glu	Cys
			20					25					30		
Cys	Phe	Arg	Ser	Cys	Asp	Leu	Arg	Arg	Leu	Glu	Met	Tyr	Cys		
		35					40					45			

<210> 140

<211> 46

<212> PRT

<213> Horse

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 140

Leu	Cys	Gly	Gly	Glu	Leu	Val	Asp	Thr	Leu	Gln	Phe	Val	Cys	Gly	Asp
1				5					10					15	
Arg	Gly	Phe	Xaa	Xaa	Xaa	Arg	Arg	Ser	Arg	Gly	Ile	Val	Glu	Glu	Cys
			20					25					30		
Cys	Phe	Arg	Ser	Cys	Asp	Leu	Ala	Leu	Leu	Glu	Thr	Tyr	Cys		
		35					40					45			

<210> 141

<211> 46

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 141

Leu	Cys	Gly	Gly	Glu	Leu	Val	Asp	Thr	Leu	Gln	Phe	Val	Cys	Gly	Asp
1				5					10					15	
Arg	Gly	Phe	Xaa	Xaa	Xaa	Arg	Arg	Ser	Arg	Gly	Ile	Val	Glu	Glu	Cys
			20					25					30		
Cys	Phe	Arg	Ser	Cys	Asp	Leu	Ala	Leu	Leu	Glu	Thr	Tyr	Cys		
		35					40					45			

<210> 142

<211> 46

<212> PRT

<213> Amphioxus

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 142

Leu Cys Gly Ser Thr Leu Ala Asp Val Leu Ser Phe Val Cys Gly Asn

1				5						10					15
Arg	Gly	Tyr	Xaa	Xaa	Xaa	Arg	Arg	Arg	Arg	Gly	Leu	Val	Glu	Glu	Cys
			20					25					30		
Cys	Tyr	Asn	Val	Cys	Asp	Tyr	Ser	Gln	Leu	Glu	Ser	Tyr	Cys		
		35					40					45			

<210> 143  
 <211> 46  
 <212> PRT  
 <213> Locust

<220>  
 <221> VARIANT  
 <222> (1)...(46)  
 <223> Xaa = Any Amino Acid

<400> 143															
Tyr	Cys	Gly	Glu	Lys	Leu	Ser	Asn	Ala	Leu	Lys	Leu	Val	Cys	Arg	Gly
1				5					10					15	
Asn	Tyr	Asn	Xaa	Xaa	Xaa	Arg	Arg	Thr	Arg	Gly	Val	Phe	Asp	Glu	Cys
			20					25					30		
Cys	Arg	Lys	Ser	Cys	Ser	Ile	Ser	Glu	Leu	Gln	Thr	Tyr	Cys		
		35					40					45			

<210> 144  
 <211> 46  
 <212> PRT  
 <213> Bommo

<220>  
 <221> VARIANT  
 <222> (1)...(46)  
 <223> Xaa = Any Amino Acid

<400> 144															
Tyr	Cys	Gly	Arg	His	Leu	Ala	Arg	Thr	Leu	Ala	Asp	Leu	Cys	Trp	Glu
1				5					10					15	
Ala	Gly	Val	Xaa	Xaa	Xaa	Arg	Gly	Lys	Arg	Gly	Ile	Val	Asp	Glu	Cys
			20					25					30		
Cys	Leu	Arg	Pro	Cys	Ser	Val	Asp	Val	Leu	Leu	Ser	Tyr	Cys		
		35					40					45			

<210> 145  
 <211> 46  
 <212> PRT  
 <213> Bommo

<220>  
 <221> VARIANT  
 <222> (1)...(46)  
 <223> Xaa = Any Amino Acid

<400> 145															
Tyr	Cys	Gly	Arg	His	Leu	Ala	Asp	Thr	Leu	Ala	Asp	Leu	Cys	Phe	Gly
1				5					10					15	
Val	Glu	Lys	Xaa	Xaa	Xaa	Arg	Gly	Lys	Arg	Gly	Val	Val	Asp	Glu	Cys



			20					25				30	
Cys	Phe	Arg	Pro	Cys	Thr	Leu	Asp	Val	Leu	Leu	Ser	Tyr	Cys
			35				40					45	

<210> 146  
 <211> 46  
 <212> PRT  
 <213> Horn worm

<220>  
 <221> VARIANT  
 <222> (1)...(46)  
 <223> Xaa = Any Amino Acid

Ile	Cys	Gly	Arg	His	Leu	Ala	Arg	Thr	Leu	Ala	Asp	Leu	Cys	Pro	Asn
1				5					10					15	
Val	Glu	Tyr	Xaa	Xaa	Xaa	Gly	Lys	Arg	Ala	Gly	Val	Ala	Asp	Asp	Cys
			20					25					30		
Cys	Asx	Asn	Ser	Cys	Thr	Met	Asp	Val	Leu	Leu	Ser	Tyr	Cys		
			35				40					45			

<210> 147  
 <211> 46  
 <212> PRT  
 <213> Bombyx mori

<220>  
 <221> VARIANT  
 <222> (1)...(46)  
 <223> Xaa = Any Amino Acid

Tyr	Cys	Gly	Arg	Arg	Leu	Ala	Thr	Met	Leu	Ser	Phe	Val	Cys	Asp	Asn
1				5					10					15	
Gln	Tyr	Gln	Xaa	Xaa	Xaa	Gly	Lys	Arg	Gln	Gly	Ile	Ala	Glu	Glu	Cys
			20					25					30		
Cys	Asn	Lys	Pro	Cys	Thr	Glu	Asn	Glu	Leu	Leu	Gly	Tyr	Cys		
			35				40					45			

<210> 148  
 <211> 46  
 <212> PRT  
 <213> Bombyx mori

<220>  
 <221> VARIANT  
 <222> (1)...(46)  
 <223> Xaa = Any Amino Acid

Tyr	Cys	Gly	Arg	Arg	Leu	Ala	Thr	Met	Leu	Leu	Tyr	Val	Cys	Asp	Asn
1				5					10					15	
Gln	Tyr	Gln	Xaa	Xaa	Xaa	Gly	Lys	Arg	Gln	Gly	Ile	Val	Glu	Glu	Cys
			20					25					30		
Cys	Asn	Lys	Pro	Cys	Thr	Glu	Asn	Glu	Leu	Leu	Gly	Tyr	Cys		

35

40

45

<210> 149  
 <211> 46  
 <212> PRT  
 <213> Bombyx mori

<220>  
 <221> VARIANT  
 <222> (1)...(46)  
 <223> Xaa = Any Amino Acid

<400> 149  
 Tyr Cys Gly Arg Arg Leu Ala Ile Met Leu Ser Tyr Leu Cys Asp Asn  
 1 5 10 15  
 Gln Tyr Leu Xaa Xaa Xaa Gly Lys Arg Gln Gly Ile Ala Glu Glu Cys  
 20 25 30  
 Cys Asn Lys Pro Cys Thr Glu Asp Glu Leu Leu Gly Tyr Cys  
 35 40 45

<210> 150  
 <211> 46  
 <212> PRT  
 <213> Caenorhabditis elegans

<220>  
 <221> VARIANT  
 <222> (1)...(46)  
 <223> Xaa = Any Amino Acid

<400> 150  
 Leu Cys Gly Ser Arg Leu Thr Thr Thr Leu Leu Ala Val Cys Arg Asn  
 1 5 10 15  
 Gln Leu Cys Xaa Xaa Xaa Gln Lys Arg Gly Gly Ile Ala Thr Glu Cys  
 20 25 30  
 Cys Glu Lys Arg Cys Ser Phe Ala Tyr Leu Lys Thr Phe Cys  
 35 40 45

<210> 151  
 <211> 46  
 <212> PRT  
 <213> Moi 3

<220>  
 <221> VARIANT  
 <222> (1)...(46)  
 <223> Xaa = Any Amino Acid

<400> 151  
 Leu Cys Gly Ser Thr Leu Ala Asn Met Val Gln Trp Leu Cys Ser Thr  
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 Tyr Thr Thr Xaa Xaa Xaa Glu Ser Arg Pro Ser Ile Val Cys Glu Cys  
 20 25 30  
 Cys Phe Asn Gln Cys Thr Val Gln Glu Leu Leu Ala Tyr Cys  
 35 40 45

<210> 152  
 <211> 46  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> VARIANT  
 <222> (1)...(46)  
 <223> Xaa = Any Amino Acid

<400> 152  
 Leu Cys Gly Arg Glu Leu Val Arg Ala Gln Ile Ala Ile Cys Gly Met  
 1 5 10 15  
 Ser Thr Trp Xaa Xaa Xaa Arg Pro Tyr Val Ala Leu Phe Glu Lys Cys  
 20 25 30  
 Cys Leu Ile Gly Cys Thr Lys Arg Ser Leu Ala Lys Tyr Cys  
 35 40 45

<210> 153  
 <211> 46  
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 <213> Homo sapiens

<220>  
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 <223> Xaa = Any Amino Acid

<400> 153  
 Leu Cys Gly His His Phe Val Arg Ala Leu Val Arg Val Cys Gly Gly  
 1 5 10 15  
 Pro Arg Trp Xaa Xaa Xaa Ala Ala Ala Thr Asn Pro Ala Arg Tyr Cys  
 20 25 30  
 Cys Leu Ser Gly Cys Thr Gln Gln Asp Leu Leu Thr Leu Cys  
 35 40 45

<210> 154  
 <211> 541  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 154  
 Met Ser Met Thr Ser Leu Ser Thr Lys Ser Arg Arg Gln Glu Asp Val  
 1 5 10 15  
 Val Ile Glu Gly Trp Leu His Lys Lys Gly Glu His Ile Arg Asn Trp  
 20 25 30  
 Arg Pro Arg Tyr Phe Met Ile Phe Asn Asp Gly Ala Leu Leu Gly Phe  
 35 40 45  
 Arg Ala Lys Pro Lys Glu Gly Gln Pro Phe Pro Glu Pro Leu Asn Asp  
 50 55 60  
 Phe Met Ile Lys Asp Ala Ala Thr Met Leu Phe Glu Lys Pro Arg Pro  
 65 70 75 80  
 Asn Met Phe Met Val Arg Cys Leu Gln Trp Thr Thr Val Ile Glu Arg  
 85 90 95  
 Thr Phe Tyr Ala Glu Ser Ala Glu Val Arg Gln Arg Trp Ile His Ala  
 100 105 110  
 Ile Glu Ser Ile Ser Lys Lys Tyr Lys Gly Thr Asn Ala Asn Pro Gln

		115					120				125				
Glu	Glu	Leu	Met	Glu	Thr	Asn	Gln	Gln	Pro	Lys	Ile	Asp	Glu	Asp	Ser
	130					135					140				
Glu	Phe	Ala	Gly	Ala	Ala	His	Ala	Ile	Met	Gly	Gln	Pro	Ser	Ser	Gly
145						150				155					160
His	Gly	Asp	Asn	Cys	Ser	Ile	Asp	Phe	Arg	Ala	Ser	Met	Ile	Ser	Ile
				165					170						175
Ala	Asp	Thr	Ser	Glu	Ala	Ala	Lys	Arg	Asp	Lys	Ile	Thr	Met	Glu	Asp
			180						185						190
Phe	Asp	Phe	Leu	Lys	Val	Leu	Gly	Lys	Gly	Thr	Phe	Gly	Lys	Val	Ile
		195					200					205			
Leu	Cys	Lys	Glu	Lys	Arg	Thr	Gln	Lys	Leu	Tyr	Ala	Ile	Lys	Ile	Leu
	210					215					220				
Lys	Lys	Asp	Val	Ile	Ile	Ala	Arg	Glu	Glu	Val	Ala	His	Thr	Leu	Thr
225					230						235				240
Glu	Asn	Arg	Val	Leu	Gln	Arg	Cys	Lys	His	Pro	Phe	Leu	Thr	Glu	Leu
				245					250						255
Lys	Tyr	Ser	Phe	Gln	Glu	Gln	His	Tyr	Leu	Cys	Phe	Val	Met	Gln	Phe
			260					265					270		
Ala	Asn	Gly	Gly	Glu	Leu	Phe	Thr	His	Val	Arg	Lys	Cys	Gly	Thr	Phe
		275					280					285			
Ser	Glu	Pro	Arg	Ala	Arg	Phe	Tyr	Gly	Ala	Glu	Ile	Val	Leu	Ala	Leu
	290					295					300				
Gly	Tyr	Leu	His	Arg	Cys	Asp	Ile	Val	Tyr	Arg	Asp	Met	Lys	Leu	Glu
305					310					315					320
Asn	Leu	Leu	Leu	Asp	Lys	Asp	Gly	His	Ile	Lys	Ile	Ala	Asp	Phe	Gly
				325					330						335
Leu	Cys	Lys	Glu	Glu	Ile	Ser	Phe	Gly	Asp	Lys	Thr	Ser	Thr	Phe	Cys
			340					345					350		
Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val	Leu	Asp	Asp	His	Asp	Tyr
		355					360					365			
Gly	Arg	Cys	Val	Asp	Trp	Trp	Gly	Val	Gly	Val	Val	Met	Tyr	Glu	Met
	370					375					380				
Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	Ser	Lys	Asp	His	Asn	Lys	Leu	Phe
385					390					395					400
Glu	Leu	Ile	Met	Ala	Gly	Asp	Leu	Arg	Phe	Pro	Ser	Lys	Leu	Ser	Gln
				405					410						415
Glu	Ala	Arg	Thr	Leu	Leu	Thr	Gly	Leu	Leu	Val	Lys	Asp	Pro	Thr	Gln
			420					425					430		
Arg	Leu	Gly	Gly	Gly	Pro	Glu	Asp	Ala	Leu	Glu	Ile	Cys	Arg	Ala	Asp
		435					440					445			
Phe	Phe	Arg	Thr	Val	Asp	Trp	Glu	Ala	Thr	Tyr	Arg	Lys	Glu	Ile	Glu
	450					455					460				
Pro	Pro	Tyr	Lys	Pro	Asn	Val	Gln	Ser	Glu	Thr	Asp	Thr	Ser	Tyr	Phe
465					470					475					480
Asp	Asn	Glu	Phe	Thr	Ser	Gln	Pro	Val	Gln	Leu	Thr	Pro	Pro	Ser	Arg
				485					490						495
Ser	Gly	Ala	Leu	Ala	Thr	Val	Asp	Glu	Gln	Glu	Glu	Met	Gln	Ser	Asn
			500					505					510		
Phe	Thr	Gln	Phe	Ser	Phe	His	Asn	Val	Met	Gly	Ser	Ile	Asn	Arg	Ile
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His	Glu	Ala	Ser	Glu	Asp	Asn	Glu	Asp	Tyr	Asp	Met	Gly			
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<210> 155  
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 <212> PRT  
 <213> Caenorhabditis elegans

<400> 155

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		20					25						30		
Arg	Pro	Arg	Tyr	Phe	Met	Ile	Phe	Asn	Asp	Gly	Ala	Leu	Leu	Gly	Phe
	35						40					45			
Arg	Ala	Lys	Pro	Lys	Glu	Gly	Gln	Pro	Phe	Pro	Glu	Pro	Leu	Asn	Asp
	50				55						60				
Phe	Met	Ile	Lys	Asp	Ala	Ala	Thr	Met	Leu	Phe	Glu	Lys	Pro	Arg	Pro
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Asn	Met	Phe	Met	Val	Arg	Cys	Leu	Gln	Trp	Thr	Thr	Val	Ile	Glu	Arg
			85					90					95		
Thr	Phe	Tyr	Ala	Glu	Ser	Ala	Glu	Val	Arg	Gln	Arg	Trp	Ile	His	Ala
			100					105					110		
Ile	Glu	Ser	Ile	Ser	Lys	Lys	Tyr	Lys	Gly	Thr	Asn	Ala	Asn	Pro	Gln
	115						120					125			
Glu	Glu	Leu	Met	Glu	Thr	Asn	Gln	Gln	Pro	Lys	Ile	Asp	Glu	Asp	Ser
	130					135					140				
Glu	Phe	Ala	Gly	Ala	Ala	His	Ala	Ile	Met	Gly	Gln	Pro	Ser	Ser	Gly
145				150					155						160
His	Gly	Asp	Asn	Cys	Ser	Ile	Asp	Phe	Arg	Ala	Ser	Met	Ile	Ser	Ile
			165					170						175	
Ala	Asp	Thr	Ser	Glu	Ala	Ala	Lys	Arg	Asp	Lys	Ile	Thr	Met	Glu	Asp
		180						185					190		
Phe	Asp	Phe	Leu	Lys	Val	Leu	Gly	Lys	Gly	Thr	Phe	Gly	Lys	Val	Ile
	195						200					205			
Leu	Cys	Lys	Glu	Lys	Arg	Thr	Gln	Lys	Leu	Tyr	Ala	Ile	Lys	Ile	Leu
	210					215					220				
Lys	Lys	Asp	Val	Ile	Ile	Ala	Arg	Glu	Glu	Val	Ala	His	Thr	Leu	Thr
225			230						235						240
Glu	Asn	Arg	Val	Leu	Gln	Arg	Cys	Lys	His	Pro	Phe	Leu	Thr	Glu	Leu
			245					250						255	
Lys	Tyr	Ser	Phe	Gln	Thr	Asn	Asp	Arg	Leu	Cys	Phe	Val	Met	Glu	Phe
		260					265						270		
Ala	Ile	Gly	Gly	Asp	Leu	Tyr	Tyr	His	Leu	Asn	Arg	Glu	Val	Gln	Met
	275					280					285				
Asn	Lys	Glu	Gly	Phe	Ser	Glu	Pro	Arg	Ala	Arg	Phe	Tyr	Gly	Ser	Glu
	290					295					300				
Ile	Val	Leu	Ala	Leu	Gly	Tyr	Leu	His	Ala	Asn	Ser	Ile	Val	Tyr	Arg
305				310					315						320
Asp	Leu	Lys	Leu	Glu	Asn	Leu	Leu	Leu	Asp	Lys	Asp	Gly	His	Ile	Lys
			325					330						335	
Ile	Ala	Asp	Phe	Gly	Leu	Cys	Lys	Glu	Glu	Ile	Ser	Phe	Gly	Asp	Lys
		340					345						350		
Thr	Ser	Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val	Leu
		355					360						365		
Asp	Asp	His	Asp	Tyr	Gly	Arg	Cys	Val	Asp	Trp	Trp	Gly	Val	Gly	Val
	370				375						380				
Val	Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	Ser	Lys	Asp
385				390						395					400
His	Asn	Lys	Leu	Phe	Glu	Leu	Ile	Met	Ala	Gly	Asp	Leu	Arg	Phe	Pro
			405					410						415	
Ser	Lys	Leu	Ser	Gln	Glu	Ala	Arg	Thr	Leu	Leu	Thr	Gly	Leu	Leu	Val
		420					425						430		
Lys	Asp	Pro	Thr	Gln	Arg	Leu	Gly	Gly	Gly	Pro	Glu	Asp	Ala	Leu	Glu
	435					440					445				
Ile	Cys	Arg	Ala	Asp	Phe	Phe	Arg	Thr	Val	Asp	Trp	Glu	Ala	Thr	Tyr
450					455						460				

Arg	Lys	Glu	Ile	Glu	Pro	Pro	Tyr	Lys	Pro	Asn	Val	Gln	Ser	Glu	Thr
465					470					475					480
Asp	Thr	Ser	Tyr	Phe	Asp	Asn	Glu	Phe	Thr	Ser	Gln	Pro	Val	Gln	Leu
				485					490					495	
Thr	Pro	Pro	Ser	Arg	Ser	Gly	Ala	Leu	Ala	Thr	Val	Asp	Glu	Gln	Glu
			500					505					510		
Glu	Met	Gln	Ser	Asn	Phe	Thr	Gln	Phe	Ser	Phe	His	Asn	Val	Met	Gly
		515					520					525			
Ser	Ile	Asn	Arg	Ile	His	Glu	Ala	Ser	Glu	Asp	Asn	Glu	Asp	Tyr	Asp
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Met	Gly														
545															

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 <212> PRT  
 <213> Caenorhabditis elegans

<400> 156

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			20					25					30		
Tyr	Phe	Ile	Leu	Phe	Arg	Asp	Gly	Thr	Leu	Leu	Gly	Phe	Arg	Ser	Lys
		35					40					45			
Pro	Lys	Glu	Asp	Gln	Pro	Leu	Pro	Glu	Pro	Leu	Asn	Asn	Phe	Met	Ile
	50					55					60				
Arg	Asp	Ala	Ala	Thr	Val	Cys	Leu	Asp	Lys	Pro	Arg	Pro	Asn	Met	Phe
65					70				75						80
Ile	Val	Arg	Cys	Leu	Gln	Trp	Thr	Thr	Val	Ile	Glu	Arg	Thr	Phe	Tyr
				85					90					95	
Ala	Asp	Ser	Ala	Asp	Phe	Arg	Gln	Met	Trp	Ile	Glu	Ala	Ile	Gln	Ala
			100					105					110		
Val	Ser	Ser	His	Asn	Arg	Leu	Lys	Glu	Asn	Ala	Gly	Asn	Thr	Ser	Met
		115					120					125			
Gln	Glu	Glu	Asp	Thr	Asn	Gly	Asn	Pro	Ser	Gly	Glu	Ser	Asp	Val	Asn
	130					135					140				
Met	Asp	Ala	Thr	Ser	Thr	Arg	Ser	Asp	Asn	Asp	Phe	Glu	Ser	Thr	Val
145					150					155					160
Met	Asn	Ile	Asp	Glu	Pro	Glu	Glu	Val	Pro	Arg	Lys	Asn	Thr	Val	Thr
			165						170					175	
Met	Asp	Asp	Phe	Asp	Phe	Leu	Lys	Val	Leu	Gly	Gln	Gly	Thr	Phe	Gly
			180					185					190		
Lys	Val	Ile	Leu	Cys	Arg	Glu	Lys	Ser	Ser	Asp	Lys	Leu	Tyr	Ala	Ile
		195					200					205			
Lys	Ile	Ile	Arg	Lys	Glu	Met	Val	Val	Asp	Arg	Ser	Glu	Val	Ala	His
	210					215					220				
Thr	Leu	Thr	Glu	Asn	Arg	Val	Leu	Tyr	Ala	Cys	Val	His	Pro	Phe	Leu
225					230					235					240
Thr	Leu	Leu	Lys	Tyr	Ser	Phe	Gln	Ala	Gln	Tyr	His	Ile	Cys	Phe	Val
			245						250					255	
Met	Glu	Phe	Ala	Asn	Gly	Gly	Glu	Leu	Phe	Thr	His	Leu	Gln	Arg	Cys
			260					265					270		
Lys	Thr	Phe	Ser	Glu	Ala	Arg	Thr	Arg	Phe	Tyr	Gly	Ser	Glu	Ile	Ile
		275					280					285			
Leu	Ala	Leu	Gly	Tyr	Leu	His	His	Arg	Asn	Ile	Val	Tyr	Arg	Asp	Met
	290					295					300				
Lys	Leu	Glu	Asn	Leu	Leu	Leu	Asp	Arg	Asp	Gly	His	Ile	Lys	Ile	Thr

305					310					315				320	
Asp	Phe	Gly	Leu	Cys	Lys	Glu	Glu	Ile	Lys	Tyr	Gly	Asp	Lys	Thr	Ser
				325					330					335	
Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val	Ile	Glu	Asp
			340					345					350		
Ile	Asp	Tyr	Asp	Arg	Ser	Val	Asp	Trp	Trp	Gly	Val	Gly	Val	Val	Met
		355					360					365			
Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Ser	Ala	Lys	Glu	Asn	Gly
	370					375					380				
Lys	Leu	Phe	Glu	Leu	Ile	Thr	Thr	Cys	Asp	Leu	Lys	Phe	Pro	Asn	Arg
385					390					395					400
Leu	Ser	Pro	Glu	Ala	Val	Thr	Leu	Leu	Ser	Gly	Leu	Leu	Glu	Arg	Val
				405					410					415	
Pro	Ala	Lys	Arg	Leu	Gly	Ala	Gly	Pro	Asp	Asp	Ala	Arg	Glu	Val	Ser
			420					425					430		
Arg	Ala	Glu	Phe	Phe	Lys	Asp	Val	Asp	Trp	Glu	Ala	Thr	Leu	Arg	Lys
		435				440						445			
Glu	Val	Glu	Pro	Pro	Phe	Lys	Pro	Asn	Val	Met	Ser	Glu	Thr	Asp	Thr
	450					455					460				
Ser	Phe	Phe	Asp	Arg	Val	Arg	Tyr	Val	Ser	Ile	Leu	Leu	Lys	Val	Ser
465					470					475					480
Glu	Ala	Ile													

<210> 157  
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 <212> PRT  
 <213> Homo sapiens

<400> 157

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Glu	Tyr	Ile	Lys	Thr	Trp	Arg	Pro	Arg	Tyr	Phe	Leu	Leu	Lys	Asn	Asp
			20					25					30		
Gly	Thr	Phe	Ile	Gly	Tyr	Lys	Glu	Arg	Pro	Gln	Val	Asp	Val	Gln	Arg
		35				40						45			
Glu	Ala	Pro	Leu	Asn	Asn	Phe	Ser	Val	Ala	Gln	Cys	Gln	Leu	Met	Lys
	50				55					60					
Thr	Glu	Arg	Pro	Arg	Pro	Asn	Thr	Phe	Ile	Ile	Arg	Cys	Leu	Gln	Trp
65					70				75						80
Thr	Thr	Val	Ile	Glu	Arg	Thr	Phe	His	Val	Glu	Thr	Pro	Glu	Glu	Arg
			85						90					95	
Glu	Glu	Trp	Thr	Thr	Ala	Ile	Gln	Thr	Val	Ala	Asp	Gly	Leu	Lys	Lys
			100				105						110		
Gln	Glu	Glu	Glu	Glu	Met	Asp	Phe	Arg	Ser	Gly	Ser	Pro	Ser	Asp	Asn
		115				120						125			
Ser	Gly	Ala	Glu	Glu	Met	Glu	Val	Ser	Leu	Ala	Lys	Pro	Lys	His	Arg
	130				135					140					
Val	Thr	Met	Asn	Glu	Phe	Glu	Tyr	Leu	Lys	Leu	Leu	Gly	Lys	Gly	Thr
145					150				155						160
Phe	Gly	Lys	Val	Ile	Leu	Val	Lys	Glu	Lys	Ala	Thr	Gly	Arg	Tyr	Tyr
			165						170					175	
Ala	Met	Lys	Ile	Leu	Lys	Lys	Glu	Val	Ile	Val	Ala	Lys	Asp	Glu	Val
			180				185						190		
Ala	His	Thr	Leu	Thr	Glu	Asn	Arg	Val	Leu	Gln	Asn	Ser	Arg	His	Pro
		195				200						205			
Phe	Leu	Thr	Ala	Leu	Lys	Tyr	Ser	Phe	Gln	Thr	His	Asp	Arg	Leu	Cys
210					215						220				

Phe	Val	Met	Glu	Tyr	Ala	Asn	Gly	Gly	Glu	Leu	Phe	Phe	His	Leu	Ser
225					230					235					240
Arg	Glu	Arg	Val	Phe	Ser	Glu	Asp	Phe	Ala	Phe	Arg	Tyr	Gly	Ala	Glu
				245					250					255	
Ile	Val	Ser	Ala	Leu	Asp	Tyr	Leu	His	Ser	Glu	Lys	Asn	Val	Val	Tyr
			260					265					270		
Arg	Asp	Leu	Lys	Leu	Glu	Asn	Leu	Met	Leu	Asp	Lys	Asp	Gly	His	Ile
		275					280					285			
Lys	Ile	Thr	Asp	Phe	Gly	Leu	Cys	Lys	Glu	Gly	Ile	Lys	Asp	Gly	Ala
	290					295					300				
Thr	Met	Lys	Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val
305					310					315					320
Leu	Glu	Asp	Asn	Asp	Tyr	Gly	Arg	Ala	Val	Asp	Trp	Trp	Gly	Leu	Gly
				325					330					335	
Val	Val	Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	Asn	Gln
			340					345					350		
Asp	His	Glu	Lys	Leu	Phe	Glu	Leu	Ile	Leu	Met	Glu	Glu	Ile	Arg	Phe
		355					360					365			
Pro	Arg	Thr	Leu	Gly	Pro	Glu	Ala	Lys	Ser	Leu	Leu	Ser	Gly	Leu	Leu
	370					375					380				
Lys	Lys	Asp	Pro	Lys	Gln	Arg	Leu	Gly	Gly	Gly	Ser	Glu	Asp	Ala	Lys
385					390					395					400
Glu	Ile	Met	Gln	His	Arg	Phe	Phe	Ala	Gly	Ile	Val	Trp	Gln	His	Val
				405					410					415	
Tyr	Glu	Lys	Lys	Leu	Ser	Pro	Pro	Phe	Lys	Pro	Gln	Val	Thr	Ser	Glu
			420					425					430		
Thr	Asp	Thr	Arg	Tyr	Phe	Asp	Glu	Glu	Phe	Thr	Ala	Gln	Met	Ile	Thr
		435					440					445			
Ile	Thr	Pro	Pro	Asp	Gln	Asp	Asp	Ser	Met	Glu	Cys	Val	Asp	Ser	Glu
	450					455					460				
Arg	Arg	Pro	His	Phe	Pro	Gln	Phe	Ser	Tyr	Ser	Ala	Ser	Ser	Thr	Ala
465					470					475					480

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 <212> DNA  
 <213> Caenorhabditis elegans

<400> 158						
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gaagcggcgc	caacggtgag	gaactagttt	ctagacgaac	atcggaatgc	ggcttaaagt	180
tcgggtgcac	ttatcaaact	agaccggttt	tttagaccct	ctttcaaagc	ggggaactgc	240
aatacacttt	ttgaacctaa	aacctagatt	tttggtgttc	taaattcttt	tgtgaattgg	300
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aagttaaata	gaaaatattt	taaaatattt	ttttttgtct	aggaaaaatt	gataaagcac	420
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atattaatta	aatatgaatt	tcgaaatatg	aatttttggt	gacttccatt	atgttttttt	780
tttcacattt	tacaactatt	ctaggcaaaa	atgaaaaaaa	aaaacttgta	gaataatttt	840
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agaacttcca	acgacttcat	gtttcttcag	agtatgggcg	aaggagccta	cagccagggt	1020
ggtgaacgag	gaaatttcca	gaaatgtgtg	caactagtat	cagagtacaa	ggaaaagctt	1080
ggaaaatact	cggaatgcct	gaattagtgc	ttgaagtaag	cttgcccatt	tttttcggaa	1140



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atttgcagtt	tttgccacaa	atctatcttg	acacaatata	cctcactatt	agttaaattgc	1260
tgagttttta	tcgattttta	tagctttttt	tacttatgta	tattcaaaat	gtatgtgttt	1320
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<210> 159  
 <211> 632  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 159

Met	Glu	Asp	Leu	Thr	Pro	Thr	Asn	Thr	Ser	Leu	Asp	Thr	Thr	Thr	Thr
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Asn	Asn	Asp	Thr	Thr	Ser	Asp	Arg	Glu	Ala	Ala	Pro	Thr	Thr	Leu	Asn
			20					25						30	
Leu	Thr	Pro	Thr	Ala	Ser	Glu	Ser	Glu	Asn	Ser	Leu	Ser	Pro	Val	Thr
		35				40					45				
Ala	Glu	Asp	Leu	Ile	Ala	Lys	Ser	Ile	Lys	Glu	Gly	Cys	Pro	Lys	Arg
	50					55					60				
Thr	Ser	Asn	Asp	Phe	Met	Phe	Leu	Gln	Ser	Met	Gly	Glu	Gly	Ala	Tyr
65					70					75					80
Ser	Gln	Val	Phe	Arg	Cys	Arg	Glu	Val	Ala	Thr	Asp	Ala	Met	Phe	Ala
			85						90					95	
Val	Lys	Val	Leu	Gln	Lys	Ser	Tyr	Leu	Asn	Arg	His	Gln	Lys	Met	Asp
			100					105						110	
Ala	Ile	Ile	Arg	Glu	Lys	Asn	Ile	Leu	Thr	Tyr	Leu	Ser	Gln	Glu	Cys
		115				120					125				
Gly	Gly	His	Pro	Phe	Val	Thr	Gln	Leu	Tyr	Thr	His	Phe	His	Asp	Gln
	130					135					140				
Ala	Arg	Ile	Tyr	Phe	Val	Ile	Gly	Leu	Val	Glu	Asn	Gly	Asp	Leu	Gly
145					150					155					160
Glu	Ser	Leu	Cys	His	Phe	Gly	Ser	Phe	Asp	Met	Leu	Thr	Ser	Lys	Phe
			165						170					175	
Phe	Ala	Ser	Glu	Ile	Leu	Thr	Gly	Leu	Gln	Phe	Leu	His	Asp	Asn	Lys



<210> 160  
 <211> 636  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 160

Met	Glu	Asp	Leu	Thr	Pro	Thr	Asn	Thr	Ser	Leu	Asp	Thr	Thr	Thr	Thr	
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Asn	Asn	Asp	Thr	Thr	Ser	Asp	Arg	Glu	Ala	Ala	Pro	Thr	Thr	Leu	Asn	
			20					25					30			
Leu	Thr	Pro	Thr	Ala	Ser	Glu	Ser	Glu	Asn	Ser	Leu	Ser	Pro	Val	Thr	
		35					40					45				
Ala	Glu	Asp	Leu	Ile	Ala	Lys	Ser	Ile	Lys	Glu	Gly	Cys	Pro	Lys	Arg	
	50					55					60					
Thr	Ser	Asn	Asp	Phe	Met	Phe	Leu	Gln	Ser	Met	Gly	Glu	Gly	Ala	Tyr	
65					70					75					80	
Ser	Gln	Val	Phe	Arg	Cys	Arg	Glu	Val	Ala	Thr	Asp	Ala	Met	Phe	Ala	
			85						90					95		
Val	Lys	Val	Leu	Gln	Lys	Ser	Tyr	Leu	Asn	Arg	His	Gln	Lys	Met	Asp	
			100					105					110			
Ala	Ile	Ile	Arg	Glu	Lys	Asn	Ile	Leu	Thr	Tyr	Leu	Ser	Gln	Glu	Cys	
		115					120						125			
Gly	Gly	His	Pro	Phe	Val	Thr	Gln	Leu	Tyr	Thr	His	Phe	His	Asp	Gln	
	130					135					140					
Ala	Arg	Ile	Tyr	Phe	Val	Ile	Gly	Leu	Val	Glu	Asn	Gly	Asp	Leu	Gly	
145					150					155					160	
Glu	Ser	Leu	Cys	His	Phe	Gly	Ser	Phe	Asp	Met	Leu	Thr	Ser	Lys	Phe	
			165						170					175		
Phe	Ala	Ser	Glu	Ile	Leu	Thr	Gly	Leu	Gln	Phe	Leu	His	Asp	Asn	Lys	
			180					185					190			
Ile	Val	His	Arg	Asp	Met	Lys	Pro	Asp	Asn	Val	Leu	Ile	Gln	Lys	Asp	
		195				200						205				
Gly	His	Ile	Leu	Ile	Thr	Asp	Phe	Gly	Ser	Ala	Gln	Ala	Phe	Gly	Gly	
	210					215					220					
Leu	Gln	Leu	Ser	Gln	Glu	Gly	Phe	Thr	Asp	Ala	Asn	Gln	Ala	Ser	Ser	
225					230					235					240	
Arg	Ser	Ser	Asp	Ser	Gly	Ser	Pro	Pro	Pro	Thr	Arg	Phe	Tyr	Ser	Asp	
			245					250						255		
Glu	Glu	Val	Pro	Glu	Glu	Asn	Thr	Ala	Arg	Arg	Thr	Thr	Phe	Val	Gly	
			260					265						270		
Thr	Ala	Leu	Tyr	Val	Ser	Pro	Glu	Met	Leu	Ala	Asp	Gly	Asp	Val	Gly	
		275					280					285				
Pro	Gln	Thr	Asp	Ile	Trp	Gly	Leu	Gly	Cys	Ile	Leu	Phe	Gln	Cys	Leu	
	290					295					300					
Ala	Gly	Gln	Pro	Pro	Phe	Arg	Ala	Val	Asn	Gln	Tyr	His	Leu	Leu	Lys	
305					310					315					320	
Arg	Ile	Gln	Glu	Leu	Asp	Phe	Ser	Phe	Pro	Glu	Gly	Phe	Pro	Glu	Glu	
			325						330					335		
Ala	Ser	Glu	Ile	Ile	Ala	Lys	Ile	Leu	Val	Arg	Asp	Pro	Ser	Thr	Arg	
			340					345					350			
Ile	Thr	Ser	Gln	Glu	Leu	Met	Ala	His	Lys	Phe	Phe	Glu	Asn	Val	Asp	
		355				360						365				
Trp	Val	Asn	Ile	Ala	Asn	Ile	Lys	Pro	Pro	Val	Leu	His	Ala	Tyr	Ile	
	370					375					380					
Pro	Ala	Thr	Phe	Gly	Glu	Pro	Glu	Tyr	Tyr	Ser	Asn	Ile	Gly	Pro	Val	
385					390					395					400	
Glu	Pro	Gly	Leu	Asp	Asp	Arg	Ala	Leu	Phe	Arg	Leu	Met	Asn	Leu	Gly	
			405						410					415		
Asn	Asp	Ala	Ser	Ala	Ser	Gln	Pro	Ser	Thr	Phe	Arg	Pro	Ser	Asn	Val	

			420					425					430				
Glu	His	Arg	Gly	Asp	Pro	Phe	Val	Ser	Glu	Ile	Ala	Pro	Arg	Ala	Asn		
		435					440					445					
Ser	Glu	Ala	Glu	Lys	Asn	Arg	Ala	Ala	Arg	Ala	Gln	Lys	Leu	Glu	Glu		
	450					455					460						
Gln	Arg	Val	Lys	Asn	Pro	Phe	His	Ile	Phe	Thr	Asn	Asn	Ser	Leu	Ile		
465					470					475					480		
Leu	Lys	Gln	Gly	Tyr	Leu	Glu	Lys	Lys	Arg	Gly	Leu	Phe	Ala	Arg	Arg		
			485						490				495				
Arg	Met	Phe	Leu	Leu	Thr	Glu	Gly	Pro	His	Leu	Leu	Tyr	Ile	Asp	Val		
		500						505					510				
Pro	Asn	Leu	Val	Leu	Lys	Gly	Glu	Val	Pro	Trp	Thr	Pro	Cys	Met	Gln		
	515					520						525					
Val	Glu	Leu	Lys	Asn	Ser	Gly	Thr	Phe	Phe	Ile	His	Thr	Pro	Asn	Arg		
	530					535					540						
Val	Tyr	Tyr	Leu	Phe	Asp	Leu	Glu	Lys	Lys	Ala	Asp	Glu	Trp	Cys	Lys		
545					550					555					560		
Ala	Ile	Asn	Asp	Val	Arg	Lys	Arg	Tyr	Ser	Val	Thr	Ile	Glu	Lys	Thr		
			565						570				575				
Phe	Asn	Ser	Ala	Met	Arg	Asp	Gly	Thr	Phe	Gly	Ser	Ile	Tyr	Gly	Lys		
		580					585						590				
Lys	Lys	Ser	Arg	Lys	Glu	Met	Met	Arg	Glu	Gln	Lys	Ala	Leu	Arg	Arg		
	595					600						605					
Lys	Gln	Glu	Lys	Glu	Glu	Lys	Lys	Ala	Leu	Lys	Ala	Glu	Gln	Val	Ser		
	610					615					620						
Lys	Lys	Leu	Ser	Met	Gln	Met	Asp	Lys	Lys	Ser	Pro						
625					630					635							

<210> 161  
 <211> 54  
 <212> PRT  
 <213> Homo sapiens

<400> 161  
 Ser Pro Val Gly His Phe Ala Lys Trp Ser Gly Ser Pro Cys Ser Arg  
 1 5 10 15  
 Asn Arg Glu Glu Ala Asp Met Trp Thr Thr Phe Arg Pro Arg Ser Ser  
 20 25 30  
 Ser Asn Ala Ser Ser Val Ser Thr Arg Leu Ser Pro Leu Arg Pro Glu  
 35 40 45  
 Ser Glu Val Leu Ala Glu  
 50

<210> 162  
 <211> 28  
 <212> PRT  
 <213> Homo sapiens

<400> 162  
 Ser Pro Phe Lys Trp Ser Pro Ser Asp Trp Thr Phe Arg Pro Arg Ser  
 1 5 10 15  
 Ser Asn Ala Ser Ser Arg Leu Ser Pro Glu Leu Glu  
 20 25

<210> 163  
 <211> 54

<212> PRT  
<213> Homo sapiens

<400> 163  
Ser Pro Gly Ser Gln Phe Ser Lys Trp Pro Ala Ser Pro Gly Ser His  
1 5 10 15  
Ser Asn Asp Asp Phe Asp Asn Trp Ser Thr Phe Arg Pro Arg Thr Ser  
20 25 30  
Ser Asn Ala Ser Thr Ile Ser Gly Arg Leu Ser Pro Ile Met Thr Glu  
35 40 45  
Gln Asp Asp Leu Gly Glu  
50

<210> 164  
<211> 17  
<212> PRT  
<213> Caenorhabditis elegans

<400> 164  
Ser Phe Arg Pro Arg Thr Gln Ser Asn Leu Ser Ile Pro Gly Ser Ser  
1 5 10 15  
Ser

<210> 165  
<211> 42  
<212> PRT  
<213> Homo sapiens

<400> 165  
Lys Ala Ala Ala Ile Ile Asp Leu Asp Pro Asp Phe Glu Pro Gln Ser  
1 5 10 15  
Arg Pro Arg Ser Cys Thr Trp Pro Leu Pro Arg Pro Glu Ile Ala Asn  
20 25 30  
Gln Pro Ser Glu Pro Pro Glu Val Glu Pro  
35 40

<210> 166  
<211> 22  
<212> PRT  
<213> Homo sapiens

<400> 166  
Ala Asp Pro Asp Phe Glu Pro Arg Pro Arg Ser Cys Thr Trp Pro Leu  
1 5 10 15  
Pro Arg Pro Glu Ser Pro  
20

<210> 167  
<211> 42  
<212> PRT  
<213> Homo sapiens

<400> 167  
Glu Ala Pro Gln Val Val Glu Ile Asp Pro Asp Phe Glu Pro Leu Pro

1		5		10		15									
Arg	Pro	Arg	Ser	Cys	Thr	Trp	Pro	Leu	Pro	Arg	Pro	Glu	Phe	Ser	Gln
		20						25					30		
Ser	Asn	Ser	Ala	Thr	Ser	Ser	Pro	Ala	Pro						
		35					40								

<210> 168  
 <211> 41  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 168
Thr Phe Met Asn Thr Pro Asp Asp Val Met Met Asn Asp Asp Met Glu
1 5 10 15
Pro Ile Pro Arg Asp Arg Cys Asn Thr Trp Pro Met Arg Arg Pro Gln
20 25 30
Leu Glu Pro Pro Leu Asn Ser Ser Pro
35 40

<210> 169  
 <211> 14  
 <212> PRT  
 <213> Caenorhabditis elegans or Homo sapiens

<400> 169
Thr Pro Val Asp Glu Pro Pro Arg Arg Thr Trp Pro Arg Pro
1 5 10

<210> 170  
 <211> 80  
 <212> PRT  
 <213> Mus musculus or Homo sapiens

<400> 170
Leu Glu Lys Gln Ala Gly Gly Asn Pro Trp His Gln Phe Val Glu Asn
1 5 10 15
Asn Leu Ile Leu Lys Met Gly Pro Val Asp Lys Arg Lys Gly Leu Phe
20 25 30
Ala Arg Arg Arg Gln Leu Leu Leu Thr Glu Gly Pro His Leu Tyr Tyr
35 40 45
Val Asp Pro Val Asn Lys Val Leu Lys Gly Glu Ile Pro Trp Ser Gln
50 55 60
Glu Leu Arg Pro Glu Ala Lys Asn Phe Lys Thr Phe Phe Val His Thr
65 70 75 80

<210> 171  
 <211> 47  
 <212> PRT  
 <213> Mus musculus or Homo sapiens or C elegans

<400> 171
Leu Glu Gln Asn Pro His Phe Asn Leu Ile Leu Lys Gly Lys Gly Leu
1 5 10 15
Phe Ala Arg Arg Arg Leu Leu Thr Glu Gly Pro His Leu Tyr Asp Asn
20 25 30

Val Leu Lys Gly Glu Pro Trp Glu Lys Asn Thr Phe Phe His Thr  
 35 40 45

<210> 172  
 <211> 80  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 172  
 Leu Glu Glu Gln Arg Val Lys Asn Pro Phe His Ile Phe Thr Asn Asn  
 1 5 10 15  
 Ser Leu Ile Leu Lys Gln Gly Tyr Leu Glu Lys Lys Arg Gly Leu Phe  
 20 25 30  
 Ala Arg Arg Arg Met Phe Leu Leu Thr Glu Gly Pro His Leu Leu Tyr  
 35 40 45  
 Ile Asp Val Pro Asn Leu Val Leu Lys Gly Glu Val Pro Trp Thr Pro  
 50 55 60  
 Cys Met Gln Val Glu Leu Lys Asn Ser Gly Thr Phe Phe Ile His Thr  
 65 70 75 80

<210> 173  
 <211> 113  
 <212> PRT  
 <213> Mus musculus or Homo sapiens

<400> 173  
 Ser Asp Leu Trp Ala Leu Gly Cys Ile Ile Tyr Gln Leu Val Ala Gly  
 1 5 10 15  
 Leu Pro Pro Phe Arg Ala Gly Asn Glu Tyr Leu Ile Phe Gln Lys Ile  
 20 25 30  
 Ile Lys Leu Glu Tyr Asp Phe Pro Glu Lys Phe Phe Pro Lys Ala Arg  
 35 40 45  
 Asp Leu Val Glu Lys Leu Leu Val Leu Asp Ala Thr Lys Arg Leu Gly  
 50 55 60  
 Cys Glu Glu Met Glu Gly Tyr Gly Pro Leu Lys Ala His Pro Phe Phe  
 65 70 75 80  
 Glu Ser Val Thr Trp Glu Asn Leu His Gln Gln Thr Pro Pro Lys Leu  
 85 90 95  
 Thr Ala Tyr Leu Pro Ala Met Ser Glu Asp Asp Glu Asp Cys Tyr Gly  
 100 105 110  
 Asn

<210> 174  
 <211> 48  
 <212> PRT  
 <213> Mus musculus or Homo sapiens or C elegans

<400> 174  
 Asp Trp Leu Gly Cys Ile Gln Ala Gly Pro Pro Phe Arg Ala Asn Tyr  
 1 5 10 15  
 Ile Leu Phe Pro Glu Phe Ala Lys Leu Val Leu Glu Pro Leu Ala His  
 20 25 30  
 Phe Phe Glu Val Trp Asn Pro Pro Leu Ala Tyr Pro Ala Glu Tyr Asn  
 35 40 45



<210> 175  
 <211> 122  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 175  
 Thr Asp Ile Trp Gly Leu Gly Cys Ile Leu Phe Gln Cys Leu Ala Gly  
 1 5 10 15  
 Gln Pro Pro Phe Arg Ala Val Asn Gln Tyr His Leu Leu Lys Arg Ile  
 20 25 30  
 Gln Glu Leu Asp Phe Ser Phe Pro Glu Gly Phe Pro Glu Glu Ala Ser  
 35 40 45  
 Glu Ile Ile Ala Lys Ile Leu Val Gly His Glu Thr Leu Lys Thr Glu  
 50 55 60  
 Tyr Val Ile Phe Asn Leu Gln Val Arg Asp Pro Ser Thr Arg Ile Thr  
 65 70 75 80  
 Ser Gln Glu Leu Met Ala His Lys Phe Phe Glu Asn Val Asp Trp Val  
 85 90 95  
 Asn Ile Ala Asn Ile Lys Pro Pro Val Leu His Ala Tyr Ile Pro Ala  
 100 105 110  
 Thr Phe Gly Glu Pro Glu Tyr Tyr Ser Asn  
 115 120

<210> 176  
 <211> 72  
 <212> PRT  
 <213> Mus musculus or Homo sapiens

<400> 176  
 Phe Gly Leu Ser Tyr Ala Lys Asn Gly Glu Leu Leu Lys Tyr Ile Arg  
 1 5 10 15  
 Lys Ile Gly Ser Phe Asp Glu Thr Cys Thr Arg Phe Tyr Thr Ala Glu  
 20 25 30  
 Ile Val Ser Ala Leu Glu Tyr Leu His Gly Lys Gly Ile Ile His Arg  
 35 40 45  
 Asp Leu Lys Pro Glu Asn Ile Leu Leu Asn Glu Asp Met His Ile Gln  
 50 55 60  
 Ile Thr Asp Phe Gly Thr Ala Lys  
 65 70

<210> 177  
 <211> 31  
 <212> PRT  
 <213> Mus musculus or Homo sapiens or C elegans

<400> 177  
 Phe Asn Gly Leu Gly Ser Phe Asp Phe Glu Ile Leu Leu His Ile His  
 1 5 10 15  
 Arg Asp Lys Pro Asn Leu Asp His Ile Ile Thr Asp Phe Gly Ala  
 20 25 30

<210> 178  
 <211> 72  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 178

Phe Val Ile Gly Leu Val Glu Asn Gly Asp Leu Gly Glu Ser Leu Cys  
1 5 10 15  
His Phe Gly Ser Phe Asp Met Leu Thr Ser Lys Phe Phe Ala Ser Glu  
20 25 30  
Ile Leu Thr Gly Leu Gln Phe Leu His Asp Asn Lys Ile Val His Arg  
35 40 45  
Asp Met Lys Pro Asp Asn Val Leu Ile Gln Lys Asp Gly His Ile Leu  
50 55 60  
Ile Thr Asp Phe Gly Ser Ala Gln  
65 70

<210> 179

<211> 48

<212> PRT

<213> Mus musculus or Homo sapiens

<400> 179

Tyr Ala Ile Lys Ile Leu Glu Lys Arg His Ile Ile Lys Glu Asn Lys  
1 5 10 15  
Val Pro Tyr Val Thr Arg Glu Arg Asp Val Met Ser Arg Leu Asp His  
20 25 30  
Pro Phe Phe Val Lys Leu Tyr Phe Thr Phe Gln Asp Asp Glu Lys Leu  
35 40 45

<210> 180

<211> 15

<212> PRT

<213> Mus musculus or Homo sapiens or C elegans

<400> 180

Ala Lys Leu Lys Lys Arg Glu Leu His Pro Phe Leu Tyr Phe Asp  
1 5 10 15

<210> 181

<211> 53

<212> PRT

<213> Caenorhabditis elegans

<400> 181

Phe Ala Val Lys Val Leu Gln Lys Ser Tyr Leu Asn Arg His Gln Lys  
1 5 10 15  
Met Asp Ala Ile Ile Arg Glu Lys Asn Ile Leu Thr Tyr Leu Ser Gln  
20 25 30  
Glu Cys Gly Gly His Pro Phe Val Thr Gln Leu Tyr Thr His Phe His  
35 40 45  
Asp Gln Ala Arg Ile  
50

<210> 182

<211> 29

<212> PRT

<213> Mus musculus or Homo sapiens

<400> 182

Pro Asn Arg Thr Tyr Tyr Leu Met Asp Pro Ser Gly Asn Ala His Lys  
 1 5 10 15  
 Trp Cys Arg Lys Ile Gln Glu Val Trp Arg Gln Arg Tyr  
 20 25

<210> 183  
 <211> 15  
 <212> PRT  
 <213> Mus musculus or Homo sapiens or C elegans

<400> 183  
 Pro Asn Arg Tyr Tyr Leu Asp Ala Trp Cys Ile Val Arg Arg Tyr  
 1 5 10 15

<210> 184  
 <211> 28  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 184  
 Pro Asn Arg Val Tyr Tyr Leu Phe Asp Leu Glu Lys Lys Ala Asp Glu  
 1 5 10 15  
 Trp Cys Lys Ala Ile Asn Asp Val Arg Lys Arg Tyr  
 20 25

<210> 185  
 <211> 25  
 <212> PRT  
 <213> Mus musculus or Homo sapiens

<400> 185  
 Pro Glu Ser Lys Gln Ala Arg Ala Asn Ser Phe Val Gly Thr Ala Gln  
 1 5 10 15  
 Tyr Val Ser Pro Glu Leu Leu Thr Glu  
 20 25

<210> 186  
 <211> 15  
 <212> PRT  
 <213> Mus musculus or Homo sapiens or C elegans

<400> 186  
 Pro Glu Ala Arg Phe Val Gly Thr Ala Tyr Val Ser Pro Glu Leu  
 1 5 10 15

<210> 187  
 <211> 25  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 187  
 Pro Glu Glu Asn Thr Ala Arg Arg Thr Thr Phe Val Gly Thr Ala Leu  
 1 5 10 15  
 Tyr Val Ser Pro Glu Met Leu Ala Asp

<210> 188  
 <211> 62  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 188  
 Lys Arg Thr Ser Asn Asp Phe Met Phe Leu Gln Ser Met Gly Glu Gly  
 1 5 10 15  
 Ala Tyr Ser Gln Val Phe Arg Cys Arg Glu Val Ala Thr Asp Ala Met  
 20 25 30  
 Phe Ala Val Lys Val Leu Gln Lys Ser Tyr Leu Asn Arg His Gln Lys  
 35 40 45  
 Met Asp Ala Ile Ile Arg Glu Lys Asn Ile Leu Thr Tyr Leu  
 50 55 60

<210> 189  
 <211> 21  
 <212> PRT  
 <213> Caenorhabditis elegans or Homo sapiens

<400> 189  
 Lys Asp Phe Phe Gly Glu Gly Ser Val Arg Glu Ala Thr Ala Lys Leu  
 1 5 10 15  
 Lys Lys Arg Glu Leu  
 20

<210> 190  
 <211> 62  
 <212> PRT  
 <213> Homo sapiens

<400> 190  
 Lys Lys Arg Pro Glu Asp Phe Lys Phe Gly Lys Ile Leu Gly Glu Gly  
 1 5 10 15  
 Ser Phe Ser Thr Val Val Leu Ala Arg Glu Leu Ala Thr Ser Arg Glu  
 20 25 30  
 Tyr Ala Ile Lys Ile Leu Glu Lys Arg His Ile Ile Lys Glu Asn Lys  
 35 40 45  
 Val Pro Tyr Val Thr Arg Glu Arg Asp Val Met Ser Arg Leu  
 50 55 60

<210> 191  
 <211> 90  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 191  
 His Pro Phe Val Thr Gln Leu Tyr Thr His Phe His Asp Gln Ala Arg  
 1 5 10 15  
 Ile Tyr Phe Val Ile Gly Leu Val Glu Asn Gly Asp Leu Gly Glu Ser  
 20 25 30  
 Leu Cys His Phe Gly Ser Phe Asp Met Leu Thr Ser Lys Phe Phe Ala  
 35 40 45

Ser Glu Ile Leu Thr Gly Leu Gln Phe Leu His Asp Asn Lys Ile Val  
50 55 60  
His Arg Asp Met Lys Pro Asp Asn Val Leu Ile Gln Lys Asp Gly His  
65 70 75 80  
Ile Leu Ile Thr Asp Phe Gly Ser Ala Gln  
85 90

<210> 192  
<211> 39  
<212> PRT  
<213> Caenorhabditis elegans

<400> 192  
His Pro Phe Leu Tyr Phe Asp Tyr Phe Asn Gly Leu Gly Ser Phe Asp  
1 5 10 15  
Phe Glu Ile Leu Leu His Ile His Arg Asp Lys Pro Asn Leu Asp His  
20 25 30  
Ile Ile Thr Asp Phe Gly Ala  
35

<210> 193  
<211> 90  
<212> PRT  
<213> Homo sapiens

<400> 193  
His Pro Phe Phe Val Lys Leu Tyr Phe Thr Phe Gln Asp Asp Glu Lys  
1 5 10 15  
Leu Tyr Phe Gly Leu Ser Tyr Ala Lys Asn Gly Glu Leu Leu Lys Tyr  
20 25 30  
Ile Arg Lys Ile Gly Ser Phe Asp Glu Thr Cys Thr Arg Phe Tyr Thr  
35 40 45  
Ala Glu Ile Val Ser Ala Leu Glu Tyr Leu His Gly Lys Gly Ile Ile  
50 55 60  
His Arg Asp Leu Lys Pro Glu Asn Ile Leu Leu Asn Glu Asp Met His  
65 70 75 80  
Ile Gln Ile Thr Asp Phe Gly Thr Ala Lys  
85 90

<210> 194  
<211> 98  
<212> PRT  
<213> Caenorhabditis elegans

<400> 194  
Glu Glu Asn Thr Ala Arg Arg Thr Thr Phe Val Gly Thr Ala Leu Tyr  
1 5 10 15  
Val Ser Pro Glu Met Leu Ala Asp Gly Asp Val Gly Pro Gln Thr Asp  
20 25 30  
Ile Trp Gly Leu Gly Cys Ile Leu Phe Gln Cys Leu Ala Gly Gln Pro  
35 40 45  
Pro Phe Arg Ala Val Asn Gln Tyr His Leu Leu Lys Arg Ile Gln Glu  
50 55 60  
Leu Asp Phe Ser Phe Pro Glu Gly Phe Pro Glu Glu Ala Ser Glu Ile  
65 70 75 80  
Ile Ala Lys Ile Leu Val Arg Asp Pro Ser Thr Arg Ile Thr Ser Gln

	85	90	95
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Glu Leu

<210> 195  
 <211> 43  
 <212> PRT  
 <213> Caenorhabditis elegans or Homo sapiens

<400> 195  
 Glu Ala Arg Phe Val Gly Thr Ala Tyr Val Ser Pro Glu Leu Asp Trp  
 1 5 10 15  
 Leu Gly Cys Ile Gln Ala Gly Pro Pro Phe Arg Ala Asn Tyr Ile Leu  
 20 25 30  
 Phe Pro Glu Phe Ala Lys Leu Val Asp Arg Glu  
 35 40

<210> 196  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 196  
 Glu Ser Lys Gln Ala Arg Ala Asn Ser Phe Val Gly Thr Ala Gln Tyr  
 1 5 10 15  
 Val Ser Pro Glu Leu Leu Thr Glu Lys Ser Ala Cys Lys Ser Ser Asp  
 20 25 30  
 Leu Trp Ala Leu Gly Cys Ile Ile Tyr Gln Leu Val Ala Gly Leu Pro  
 35 40 45  
 Pro Phe Arg Ala Gly Asn Glu Tyr Leu Ile Phe Gln Lys Ile Ile Lys  
 50 55 60  
 Leu Glu Tyr Asp Phe Pro Glu Lys Phe Phe Pro Lys Ala Arg Asp Leu  
 65 70 75 80  
 Val Glu Lys Leu Leu Val Leu Asp Ala Thr Lys Arg Leu Gly Cys Glu  
 85 90 95

Glu Met

<210> 197  
 <211> 35  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 197  
 Leu Met Ala His Lys Phe Phe Glu Asn Val Asp Trp Val Asn Ile Ala  
 1 5 10 15  
 Asn Ile Lys Pro Pro Val Leu His Ala Tyr Ile Pro Ala Thr Phe Gly  
 20 25 30  
 Glu Pro Glu  
 35

<210> 198  
 <211> 17  
 <212> PRT  
 <213> Caenorhabditis elegans or Homo sapiens

<400> 198  
 Leu Ala His Phe Phe Glu Val Trp Asn Pro Pro Leu Ala Tyr Pro Ala  
 1 5 10 15  
 Glu

<210> 199  
 <211> 35  
 <212> PRT  
 <213> Homo sapiens

<400> 199  
 Leu Lys Ala His Pro Phe Phe Glu Ser Val Thr Trp Glu Asn Leu His  
 1 5 10 15  
 Gln Gln Thr Pro Pro Lys Leu Thr Ala Tyr Leu Pro Ala Met Ser Glu  
 20 25 30  
 Asp Asp Glu  
 35

<210> 200  
 <211> 104  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 200  
 Leu Glu Glu Gln Arg Val Lys Asn Pro Phe His Ile Phe Thr Asn Asn  
 1 5 10 15  
 Ser Leu Ile Leu Lys Gln Gly Tyr Leu Glu Lys Lys Arg Gly Leu Phe  
 20 25 30  
 Ala Arg Arg Arg Met Phe Leu Leu Thr Glu Gly Pro His Leu Leu Tyr  
 35 40 45  
 Ile Asp Val Pro Asn Leu Val Leu Lys Gly Glu Val Pro Trp Thr Pro  
 50 55 60  
 Cys Met Gln Val Glu Leu Lys Asn Ser Gly Thr Phe Phe Ile His Thr  
 65 70 75 80  
 Pro Asn Arg Val Tyr Tyr Leu Phe Asp Leu Glu Lys Lys Ala Asp Glu  
 85 90 95  
 Trp Cys Lys Ala Ile Asn Asp Val  
 100

<210> 201  
 <211> 59  
 <212> PRT  
 <213> Caenorhabditis elegans or Homo sapiens

<400> 201  
 Leu Glu Gln Asn Pro His Phe Asn Leu Ile Leu Lys Gly Lys Gly Leu  
 1 5 10 15  
 Phe Ala Arg Arg Arg Leu Leu Thr Glu Gly Pro His Leu Tyr Asp Asn  
 20 25 30  
 Val Leu Lys Gly Glu Pro Trp Glu Lys Asn Thr Phe Phe His Thr Pro  
 35 40 45  
 Asn Arg Tyr Tyr Leu Asp Ala Trp Cys Ile Val  
 50 55

<210> 202  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 202  
 Leu Glu Lys Gln Ala Gly Gly Asn Pro Trp His Gln Phe Val Glu Asn  
 1 5 10 15  
 Asn Leu Ile Leu Lys Met Gly Pro Val Asp Lys Arg Lys Gly Leu Phe  
 20 25 30  
 Ala Arg Arg Arg Gln Leu Leu Leu Thr Glu Gly Pro His Leu Tyr Tyr  
 35 40 45  
 Val Asp Pro Val Asn Lys Val Leu Lys Gly Glu Ile Pro Trp Ser Gln  
 50 55 60  
 Glu Leu Arg Pro Glu Ala Lys Asn Phe Lys Thr Phe Phe Val His Thr  
 65 70 75 80  
 Pro Asn Arg Thr Tyr Tyr Leu Met Asp Pro Ser Gly Asn Ala His Lys  
 85 90 95  
 Trp Cys Arg Lys Ile Gln Glu Val  
 100

<210> 203  
 <211> 45  
 <212> PRT  
 <213> Homo sapiens

<400> 203  
 Lys Leu Glu Asn Leu Met Leu Asp Lys Asp Gly His Ile Lys Ile Thr  
 1 5 10 15  
 Asp Phe Gly Leu Cys Lys Glu Gly Ile Lys Asp Gly Ala Thr Met Lys  
 20 25 30  
 Thr Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val  
 35 40 45

<210> 204  
 <211> 36  
 <212> PRT  
 <213> Homo sapiens or Caenorhabditis elegans

<400> 204  
 Lys Leu Glu Asn Leu Leu Asp Lys Asp Gly His Ile Lys Ile Asp Phe  
 1 5 10 15  
 Gly Leu Cys Lys Glu Ile Gly Thr Phe Cys Gly Thr Pro Glu Tyr Leu  
 20 25 30  
 Ala Pro Glu Val  
 35

<210> 205  
 <211> 45  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 205  
 Lys Leu Glu Asn Leu Leu Leu Asp Lys Asp Gly His Ile Lys Ile Ala  
 1 5 10 15  
 Asp Phe Gly Leu Cys Lys Glu Glu Ile Ser Phe Gly Asp Lys Thr Ser



			20						25				30
Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val	
		35					40					45	

<210> 206  
 <211> 62  
 <212> PRT  
 <213> *Caenorhabditis elegans*

<400> 206

Leu	Cys	Lys	Glu	Glu	Ile	Lys	Tyr	Gly	Asp	Lys	Thr	Ser	Thr	Phe	Cys
1				5				10						15	
Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val	Ile	Glu	Asp	Ile	Asp	Tyr
			20					25					30		
Asp	Arg	Ser	Val	Asp	Trp	Trp	Gly	Val	Gly	Val	Val	Met	Tyr	Glu	Met
		35					40					45			
Met	Cys	Gly	Arg	Leu	Pro	Phe	Ser	Ala	Lys	Glu	Asn	Gly	Lys		
	50					55					60				

<210> 207  
 <211> 43  
 <212> PRT  
 <213> *Caenorhabditis elegans* or *Mus musculus*

<400> 207

Leu	Cys	Lys	Glu	Ile	Gly	Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala
1				5					10					15	
Pro	Glu	Val	Glu	Asp	Asp	Tyr	Arg	Val	Asp	Trp	Trp	Gly	Gly	Val	Val
			20					25					30		
Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe					
		35					40								

<210> 208  
 <211> 492  
 <212> PRT  
 <213> *Caenorhabditis elegans*

<400> 208

Met	Gly	Val	Asn	Asp	His	Asp	Val	Ser	Val	Pro	Leu	Gln	Glu	Val	Gln
1				5					10					15	
Ser	Arg	Thr	Val	Glu	Gly	Lys	Leu	Thr	Lys	Cys	Leu	Ala	Phe	Ser	Ala
			20					25					30		
Phe	Val	Ile	Thr	Leu	Ala	Ser	Phe	Gln	Phe	Gly	Tyr	His	Ile	Gly	Cys
		35					40					45			
Val	Asn	Ala	Pro	Gly	Gly	Leu	Ile	Thr	Glu	Trp	Ile	Ile	Gly	Ser	His
	50					55				60					
Lys	Asp	Leu	Phe	Asp	Lys	Glu	Leu	Ser	Arg	Glu	Asn	Ala	Asp	Leu	Ala
65					70				75					80	
Trp	Ser	Val	Ala	Val	Ser	Val	Phe	Ala	Val	Gly	Gly	Met	Ile	Gly	Gly
			85					90					95		
Leu	Ser	Ser	Gly	Trp	Leu	Ala	Asp	Lys	Val	Gly	Arg	Arg	Gly	Ala	Leu
			100					105					110		
Phe	Tyr	Asn	Asn	Leu	Leu	Ala	Leu	Ala	Ala	Ala	Ala	Leu	Met	Gly	Leu
		115					120					125			
Ala	Lys	Ser	Val	Gly	Ala	Tyr	Pro	Met	Val	Ile	Leu	Gly	Arg	Leu	Ile
		130				135					140				

Ile	Gly	Leu	Asn	Cys	Gly	Phe	Ser	Ser	Ala	Leu	Val	Pro	Met	Phe	Leu	145	150	155	160
Thr	Glu	Ile	Ser	Pro	Asn	Asn	Leu	Arg	Gly	Met	Leu	Gly	Ser	Leu	His	165	170		175
Gln	Leu	Leu	Val	Thr	Ile	Ala	Ile	Leu	Val	Ser	Gln	Ile	Phe	Gly	Leu	180	185		190
Pro	His	Leu	Leu	Gly	Thr	Gly	Asp	Arg	Trp	Pro	Leu	Ile	Phe	Ala	Phe	195	200		205
Thr	Val	Val	Pro	Ala	Val	Leu	Gln	Leu	Ala	Leu	Leu	Met	Leu	Cys	Pro	210	215		220
Glu	Ser	Pro	Lys	Tyr	Thr	Met	Ala	Val	Arg	Gly	Gln	Arg	Asn	Glu	Ala	225	230		240
Glu	Ser	Ala	Leu	Lys	Lys	Leu	Arg	Asp	Thr	Glu	Asp	Val	Ser	Thr	Glu	245	250		255
Ile	Glu	Ala	Met	Gln	Glu	Glu	Ala	Thr	Ala	Ala	Gly	Val	Gln	Glu	Lys	260	265		270
Pro	Lys	Met	Gly	Asp	Met	Phe	Lys	Gly	Ala	Leu	Leu	Trp	Pro	Met	Ser	275	280		285
Ile	Ala	Ile	Met	Met	Met	Leu	Ala	Gln	Gln	Leu	Ser	Gly	Ile	Asn	Val	290	295		300
Ala	Met	Phe	Tyr	Ser	Thr	Val	Ile	Phe	Arg	Gly	Ala	Gly	Leu	Thr	Gly	305	310		320
Asn	Glu	Pro	Phe	Tyr	Ala	Thr	Ile	Gly	Met	Gly	Ala	Val	Asn	Val	Ile	325	330		335
Met	Thr	Leu	Ile	Ser	Val	Trp	Leu	Val	Asp	His	Pro	Lys	Phe	Gly	Arg	340	345		350
Arg	Ser	Leu	Leu	Leu	Ala	Gly	Leu	Thr	Gly	Met	Phe	Val	Ser	Thr	Leu	355	360		365
Leu	Leu	Val	Gly	Ala	Leu	Thr	Ile	Gln	Asn	Ser	Gly	Gly	Asp	Lys	Trp	370	375		380
Ala	Ser	Tyr	Ser	Ala	Ile	Gly	Phe	Val	Leu	Leu	Phe	Val	Ile	Ser	Phe	385	390		400
Ala	Thr	Gly	Pro	Gly	Ala	Ile	Pro	Trp	Phe	Phe	Val	Ser	Glu	Ile	Phe	405	410		415
Asp	Ser	Ser	Ala	Arg	Gly	Asn	Ala	Asn	Ser	Ile	Ala	Val	Met	Val	Asn	420	425		430
Trp	Ala	Ala	Asn	Leu	Leu	Val	Gly	Leu	Thr	Phe	Leu	Pro	Ile	Asn	Asn	435	440		445
Leu	Met	Gln	Gln	Tyr	Ser	Phe	Phe	Ile	Phe	Ser	Gly	Phe	Leu	Ala	Phe	450	455		460
Phe	Ile	Phe	Tyr	Thr	Trp	Lys	Phe	Val	Pro	Glu	Thr	Lys	Gly	Lys	Ser	465	470		480
Ile	Glu	Gln	Ile	Gln	Ala	Glu	Phe	Glu	Lys	Arg	Lys					485	490		

<210> 209

<211> 22

<212> PRT

<213> Caenorhabditis elegans

<400> 209

Arg	Asn	Glu	Ala	Glu	Ser	Ala	Leu	Lys	Lys	Leu	Arg	Asp	Thr	Glu	Asp	1	5	10	15
Val	Ser	Thr	Glu	Ile	Glu											20			

<210> 210

<211> 28  
 <212> DNA  
 <213> Caenorhabditis elegans

<400> 210  
 tctcgttggt tgccgtcgga tgtctgcc

28

<210> 211  
 <211> 223  
 <212> PRT  
 <213> Ascoris suum

<400> 211  
 Ala Lys Asn Asn Gly Glu Phe Val Arg Cys Val His Ser Val Gly Gln  
 1 5 10 15  
 Pro Lys Pro Val Ala Thr Lys Val Ile Asn His Trp Pro Cys Asn Pro  
 20 25 30  
 Glu Lys Thr Ile Ile Ala His Arg Pro Ala Glu Arg Glu Ile Trp Ser  
 35 40 45  
 Phe Gly Ser Gly Tyr Gly Gly Asn Ser Leu Leu Gly Lys Lys Cys Phe  
 50 55 60  
 Ala Leu Arg Ile Ala Met Asn Ile Gly Tyr Asp Glu Gly Trp Met Ala  
 65 70 75 80  
 Glu His Met Leu Ile Met Gly Val Thr Ser Pro Lys Gly Glu Glu Arg  
 85 90 95  
 Phe Val Ala Ala Phe Pro Ser Ala Cys Gly Lys Thr Asn Leu Ala  
 100 105 110  
 Met Leu Glu Pro Thr Ile Pro Gly Trp Lys Val Arg Val Ile Gly Asp  
 115 120 125  
 Asp Ile Ala Trp Met Lys Phe Gly Ala Asp Gly Arg Leu Tyr Ala Ile  
 130 135 140  
 Asn Pro Glu Tyr Gly Phe Phe Gly Val Ala Pro Gly Thr Ser His Lys  
 145 150 155 160  
 Thr Asn Pro Met Ala Met Ala Ser Phe Gln Glu Asn Thr Ile Phe Thr  
 165 170 175  
 Asn Val Ala Glu Thr Ala Asp Gly Glu Tyr Phe Trp Glu Gly Leu Glu  
 180 185 190  
 His Glu Val Lys Asn Pro Lys Val Asp Met Ile Asn Trp Leu Gly Glu  
 195 200 205  
 Pro Trp His Ile Gly Asp Glu Ser Lys Ala Ala His Pro Asn Ser  
 210 215 220

<210> 212  
 <211> 176  
 <212> PRT  
 <213> Caenorhabditis elegans or Ascoris suum

<400> 212  
 Ala Asn Phe Val Arg Cys His Ser Val Gly Pro Pro Val Val Ile Asn  
 1 5 10 15  
 His Trp Pro Cys Asn Pro Glu Ile Ala His Arg Pro Glu Arg Glu Ile  
 20 25 30  
 Trp Ser Phe Gly Ser Gly Tyr Gly Gly Asn Ser Leu Leu Gly Lys Lys  
 35 40 45  
 Cys Phe Ala Leu Arg Ile Ala Asn Ile Asp Glu Gly Trp Met Ala Glu  
 50 55 60  
 His Met Leu Ile Met Gly Val Thr Pro Gly Glu Phe Ala Ala Ala Phe  
 65 70 75 80

Pro	Ser	Ala	Cys	Gly	Lys	Thr	Asn	Leu	Ala	Met	Leu	Glu	Pro	Thr	Pro
				85					90					95	
Gly	Trp	Lys	Val	Arg	Gly	Asp	Asp	Ile	Ala	Trp	Met	Lys	Phe	Gly	Asp
			100					105					110		
Gly	Arg	Leu	Tyr	Ala	Ile	Asn	Pro	Glu	Gly	Phe	Phe	Gly	Val	Ala	Pro
		115					120					125			
Gly	Thr	Ser	Lys	Thr	Asn	Pro	Met	Ala	Ala	Phe	Gln	Asn	Ile	Phe	Thr
	130					135					140				
Asn	Val	Ala	Glu	Thr	Ala	Gly	Glu	Tyr	Phe	Trp	Glu	Gly	Leu	Glu	Glu
145					150					155					160
Val	Asp	Trp	Leu	Gly	Glu	Trp	His	Ile	Gly	Ala	Ala	His	Pro	Asn	Ser
			165						170					175	

<210> 213  
 <211> 223  
 <212> PRT  
 <213> *Caenorhabditis elegans*

<400> 213

Ala	Leu	Gly	Asn	Gln	Asp	Phe	Val	Arg	Cys	Ile	His	Ser	Val	Gly	Leu
1				5					10					15	
Pro	Arg	Pro	Val	Lys	Gln	Arg	Val	Ile	Asn	His	Trp	Pro	Cys	Asn	Pro
			20					25					30		
Glu	Arg	Val	Leu	Ile	Ala	His	Arg	Pro	Pro	Glu	Arg	Glu	Ile	Trp	Ser
		35					40					45			
Phe	Gly	Ser	Gly	Tyr	Gly	Gly	Asn	Ser	Leu	Leu	Gly	Lys	Lys	Cys	Phe
	50					55					60				
Ala	Leu	Arg	Ile	Ala	Ser	Asn	Ile	Ala	Lys	Asp	Glu	Gly	Trp	Met	Ala
65					70					75					80
Glu	His	Met	Leu	Ile	Met	Gly	Val	Thr	Arg	Pro	Cys	Gly	Arg	Glu	His
				85					90					95	
Phe	Ile	Ala	Ala	Ala	Phe	Pro	Ser	Ala	Cys	Gly	Lys	Thr	Asn	Leu	Ala
			100					105					110		
Met	Leu	Glu	Pro	Thr	Leu	Pro	Gly	Trp	Lys	Val	Arg	Cys	Val	Gly	Asp
		115					120					125			
Asp	Ile	Ala	Trp	Met	Lys	Phe	Gly	Glu	Asp	Gly	Arg	Leu	Tyr	Ala	Ile
	130					135					140				
Asn	Pro	Glu	Ala	Gly	Phe	Gly	Val	Ala	Pro	Gly	Thr	Ser	Asn	Lys	
145				150					155					160	
Thr	Asn	Pro	Met	Ala	Val	Ala	Thr	Phe	Gln	Lys	Asn	Ser	Ile	Phe	Thr
			165						170					175	
Asn	Val	Ala	Glu	Thr	Ala	Asn	Gly	Glu	Tyr	Phe	Trp	Glu	Gly	Leu	Glu
			180					185					190		
Asp	Glu	Ile	Ala	Asp	Lys	Asn	Val	Asp	Ile	Thr	Thr	Trp	Leu	Gly	Glu
		195				200						205			
Lys	Trp	His	Ile	Gly	Glu	Pro	Gly	Val	Ala	Ala	His	Pro	Asn	Ser	
	210					215					220				

<210> 214  
 <211> 173  
 <212> PRT  
 <213> *Ascoris suum*

<400> 214

Lys	Gly	Asp	Phe	Val	Ser	Leu	Pro	Lys	His	Val	Gln	Arg	Phe	Val	Ala
1				5					10					15	
Glu	Lys	Ala	Glu	Leu	Met	Lys	Pro	Ser	Ala	Ile	Phe	Ile	Cys	Asp	Gly

			20					25				30				
Ser	Gln	Asn	Glu	Ala	Asp	Glu	Leu	Ile	Ala	Arg	Cys	Val	Glu	Arg	Gly	
		35					40					45				
Val	Leu	Val	Pro	Leu	Lys	Ala	Tyr	Lys	Asn	Asn	Tyr	Leu	Cys	Arg	Thr	
	50					55					60					
Asp	Pro	Arg	Asp	Val	Ala	Arg	Val	Glu	Ser	Lys	Thr	Trp	Met	Ile	Thr	
65					70					75					80	
Pro	Glu	Lys	Tyr	Asp	Ser	Val	Cys	His	Thr	Pro	Glu	Gly	Val	Lys	Pro	
				85					90					95		
Met	Met	Gly	Gln	Trp	Met	Ser	Pro	Asp	Glu	Phe	Gly	Lys	Glu	Leu	Asp	
			100					105					110			
Asp	Arg	Phe	Pro	Gly	Cys	Met	Ala	Gly	Arg	Thr	Met	Tyr	Val	Ile	Pro	
		115					120					125				
Tyr	Ser	Met	Gly	Pro	Val	Gly	Gly	Pro	Leu	Ser	Lys	Ile	Gly	Ile	Glu	
	130					135					140					
Leu	Thr	Asp	Ser	Asp	Tyr	Val	Val	Leu	Cys	Met	Arg	Ile	Met	Thr	Arg	
145					150					155					160	
Met	Gly	Glu	Pro	Val	Leu	Lys	Ala	Leu	Ala	Lys	Asn	Asn				
				165				170								

<210> 215  
 <211> 120  
 <212> PRT  
 <213> Caenorhabditis elegans or Ascoris suum

Gly	Asp	Phe	Leu	Pro	Val	Gln	Arg	Phe	Ala	Glu	Lys	Ala	Glu	Leu	Met	
1				5					10					15		
Pro	Ile	Phe	Ile	Cys	Asp	Gly	Ser	Gln	Glu	Ala	Asp	Glu	Leu	Ile	Glu	
			20					25					30			
Arg	Gly	Leu	Leu	Ala	Tyr	Asn	Asn	Tyr	Cys	Arg	Thr	Asp	Pro	Asp	Val	
		35				40						45				
Ala	Arg	Val	Glu	Ser	Lys	Thr	Trp	Met	Thr	Lys	Tyr	Asp	Val	His	Thr	
	50					55					60					
Glu	Gly	Val	Pro	Met	Gly	Trp	Pro	Glu	Leu	Asp	Arg	Phe	Pro	Gly	Cys	
65					70					75					80	
Met	Ala	Gly	Arg	Met	Tyr	Val	Ile	Pro	Ser	Met	Gly	Pro	Val	Gly	Gly	
				85				90						95		
Pro	Leu	Ser	Lys	Ile	Gly	Ile	Leu	Thr	Asp	Ser	Tyr	Val	Val	Leu	Met	
			100					105					110			
Arg	Ile	Met	Thr	Arg	Val	Ala	Leu									
		115					120									

<210> 216  
 <211> 173  
 <212> PRT  
 <213> Caenorhabditis elegans

Gln	Gly	Asp	Phe	His	Leu	Leu	Pro	Ala	Lys	Val	Gln	Arg	Phe	Ile	Ala	
1				5					10					15		
Glu	Lys	Ala	Glu	Leu	Met	Arg	Pro	Arg	Gly	Ile	Phe	Ile	Cys	Asp	Gly	
			20					25					30			
Ser	Gln	His	Glu	Ala	Asp	Glu	Leu	Ile	Asp	Lys	Leu	Ile	Glu	Arg	Gly	
		35				40						45				
Met	Leu	Ser	Lys	Leu	Glu	Ala	Tyr	Glu	Asn	Asn	Tyr	Ile	Cys	Arg	Thr	
	50					55					60					

Asp	Pro	Lys	Asp	Val	Ala	Arg	Val	Glu	Ser	Lys	Thr	Trp	Met	Val	Thr
65					70					75					80
Lys	Asn	Lys	Tyr	Asp	Thr	Val	Thr	His	Thr	Lys	Glu	Gly	Val	Glu	Pro
			85						90					95	
Ile	Met	Gly	His	Trp	Leu	Ala	Pro	Glu	Asp	Leu	Ala	Thr	Glu	Leu	Asp
			100					105					110		
Ser	Arg	Phe	Pro	Gly	Cys	Met	Ala	Gly	Arg	Ile	Met	Tyr	Val	Ile	Pro
		115					120					125			
Phe	Ser	Met	Gly	Pro	Val	Gly	Gly	Pro	Leu	Ser	Lys	Ile	Gly	Ile	Gln
	130					135					140				
Leu	Thr	Asp	Ser	Asn	Tyr	Val	Val	Leu	Ser	Met	Arg	Ile	Met	Thr	Arg
145					150					155					160
Val	Asn	Asn	Asp	Val	Trp	Asp	Ala	Leu	Gly	Asn	Gln	Asp			
			165						170						

<210> 217  
 <211> 107  
 <212> PRT  
 <213> Ascoris suum

<400> 217

Arg	Phe	Thr	Ala	Pro	Ala	Gly	Gln	Cys	Pro	Ile	Ile	His	Pro	Asp	Trp
1				5					10					15	
Glu	Lys	Pro	Glu	Gly	Val	Pro	Ile	Asp	Ala	Ile	Ile	Phe	Gly	Gly	Arg
			20					25					30		
Arg	Pro	Glu	Gly	Val	Pro	Leu	Val	Phe	Glu	Ser	Arg	Ser	Trp	Val	His
		35					40					45			
Gly	Ile	Phe	Val	Gly	Ala	Cys	Val	Lys	Ser	Glu	Ala	Thr	Ala	Ala	Ala
	50					55					60				
Glu	His	Thr	Gly	Lys	Gln	Val	Met	His	Asp	Pro	Met	Ala	Met	Arg	Pro
65					70					75					80
Phe	Met	Gly	Tyr	Asn	Phe	Gly	Arg	Tyr	Met	Arg	His	Trp	Met	Lys	Leu
				85					90					95	
Gly	Gln	Pro	Pro	His	Lys	Val	Pro	Lys	Ile	Phe					
			100					105							

<210> 218  
 <211> 77  
 <212> PRT  
 <213> Caenorhabditis elegans or Ascoris suum

<400> 218

Arg	Phe	Ala	Pro	Ala	Gln	Cys	Pro	Ile	Ile	His	Pro	Asp	Trp	Glu	Pro
1				5					10					15	
Gly	Val	Pro	Ile	Ala	Ile	Ile	Phe	Gly	Gly	Arg	Arg	Pro	Gly	Val	Pro
			20					25					30		
Leu	Glu	Ser	Trp	His	Gly	Phe	Gly	Cys	Lys	Ser	Glu	Ala	Thr	Ala	Ala
		35					40					45			
Ala	Glu	Thr	Gly	Lys	Val	Met	His	Asp	Pro	Met	Ala	Met	Arg	Pro	Phe
	50					55					60				
Met	Gly	Tyr	Asn	Phe	Gly	Tyr	His	Trp	Leu	Lys	Val	Phe			
65					70					75					

<210> 219  
 <211> 107  
 <212> PRT

<213> Caenorhabditis elegans

<400> 219

Arg	Phe	Ala	Ala	Pro	Ala	Asn	Gln	Cys	Pro	Ile	Ile	His	Pro	Asp	Trp
1				5					10					15	
Glu	Ser	Pro	Gln	Gly	Val	Pro	Ile	Glu	Ala	Ile	Ile	Phe	Gly	Gly	Arg
			20					25					30		
Arg	Pro	Gln	Gly	Val	Pro	Leu	Ile	Tyr	Glu	Thr	Asn	Ser	Trp	Glu	His
		35					40					45			
Gly	Val	Phe	Thr	Gly	Ser	Cys	Leu	Lys	Ser	Glu	Ala	Thr	Ala	Ala	Ala
	50					55					60				
Glu	Phe	Thr	Gly	Lys	Thr	Val	Met	His	Asp	Pro	Met	Ala	Met	Arg	Pro
65					70					75					80
Phe	Met	Gly	Tyr	Asn	Phe	Gly	Lys	Tyr	Leu	Gln	His	Trp	Leu	Asp	Leu
				85					90					95	
Lys	Thr	Asp	Ser	Arg	Lys	Val	Ile	Asp	Phe	Phe					
			100					105							

<210> 220

<211> 116

<212> PRT

<213> Ascoris suum

<400> 220

Val	Pro	Lys	Ile	Phe	His	Val	Asn	Trp	Phe	Arg	Gln	Ser	Ala	Asp	His
1				5					10					15	
Lys	Phe	Leu	Trp	Pro	Gly	Tyr	Gly	Asp	Asn	Ile	Arg	Val	Ile	Asp	Trp
			20					25					30		
Ile	Leu	Arg	Arg	Cys	Ser	Gly	Asp	Ala	Thr	Ile	Ala	Glu	Glu	Thr	Pro
		35					40					45			
Ile	Gly	Phe	Ile	Pro	Lys	Lys	Gly	Thr	Ile	Asn	Leu	Glu	Gly	Leu	Pro
	50					55					60				
Asn	Val	Asn	Trp	Asp	Glu	Leu	Met	Ser	Ile	Pro	Lys	Ser	Tyr	Trp	Leu
65					70					75					80
Glu	Asp	Met	Val	Glu	Thr	Lys	Thr	Phe	Phe	Glu	Asn	Gln	Val	Gly	Ser
				85					90					95	
Asp	Leu	Pro	Pro	Glu	Ile	Ala	Lys	Glu	Leu	Glu	Ala	Gln	Thr	Glu	Arg
			100					105					110		
Ile	Lys	Ala	Leu												
			115												

<210> 221

<211> 68

<212> PRT

<213> Caenorhabditis elegans or Ascoris suum

<400> 221

Pro	Lys	Ile	His	Val	Asn	Trp	Phe	Arg	Lys	Phe	Leu	Trp	Pro	Gly	Gly
1				5					10					15	
Asp	Asn	Ile	Arg	Val	Ile	Asp	Trp	Ile	Arg	Arg	Gly	Ile	Glu	Thr	Pro
			20					25					30		
Ile	Gly	Pro	Lys	Gly	Ile	Asn	Leu	Glu	Gly	Leu	Val	Asn	Trp	Asp	Glu
		35					40					45			
Leu	Met	Ser	Pro	Tyr	Trp	Asp	Glu	Phe	Gln	Val	Gly	Asp	Leu	Pro	Glu
	50					55					60				
Ala	Gln	Arg	Leu												
65															

<210> 222  
 <211> 116  
 <212> PRT  
 <213> *Caenorhabditis elegans*

<400> 222  
 Met Pro Lys Ile Tyr His Val Asn Trp Phe Arg Lys Asp Ser Asn Asn  
 1 5 10 15  
 Lys Phe Leu Trp Pro Gly Phe Gly Asp Asn Ile Arg Val Ile Asp Trp  
 20 25 30  
 Ile Ile Arg Arg Leu Asp Gly Glu Gln Glu Ile Gly Val Glu Thr Pro  
 35 40 45  
 Ile Gly Thr Val Pro Ala Lys Gly Ser Ile Asn Leu Glu Gly Leu Gly  
 50 55 60  
 Glu Val Asn Trp Asp Glu Leu Met Ser Val Pro Ala Asp Tyr Trp Lys  
 65 70 75 80  
 Gln Asp Ala Gln Glu Ile Arg Lys Phe Leu Asp Glu Gln Val Gly Glu  
 85 90 95  
 Asp Leu Pro Glu Pro Val Arg Ala Glu Met Asp Ala Gln Glu Lys Arg  
 100 105 110  
 Val Gln Thr Leu  
 115

<210> 223  
 <211> 36  
 <212> PRT  
 <213> *Ascoris suum*

<400> 223  
 Ser Leu Ser His Phe Lys Asp Asp Asp Phe Ala Val Val Ser Glu Val  
 1 5 10 15  
 Val Thr His Lys Gln Asn His Ile Pro Val Ile Lys Gly Asp Phe Val  
 20 25 30  
 Ser Leu Pro Lys  
 35

<210> 224  
 <211> 15  
 <212> PRT  
 <213> *Caenorhabditis elegans* or *Ascoris suum*

<400> 224  
 Ser Leu Asp Phe Val Val Glu Val Val His Pro Lys Phe Ser Lys  
 1 5 10 15

<210> 225  
 <211> 36  
 <212> PRT  
 <213> *Caenorhabditis elegans*

<400> 225  
 Ser Leu Arg Gln Ile Ser Glu Asp Ala Phe Tyr Val Val Asn Glu Val  
 1 5 10 15  
 Val Met Lys Arg Leu Gly His Val Pro Ile Leu Lys Val Ile Phe Glu  
 20 25 30



Ser Ser Glu Lys  
35

<210> 226  
<211> 25  
<212> PRT  
<213> Ascoris suum

<400> 226  
Gly Cys Met Ala Gly Arg Thr Met Tyr Val Ile Pro Tyr Ser Met Gly  
1 5 10 15  
Pro Val Gly Gly Pro Leu Ser Lys Ile  
20 25

<210> 227  
<211> 9  
<212> PRT  
<213> Caenorhabditis elegans or Ascoris suum

<400> 227  
Gly Cys Arg Val Pro Ser Pro Leu Lys  
1 5

<210> 228  
<211> 25  
<212> PRT  
<213> Caenorhabditis elegans

<400> 228  
Gly Cys Ser Gly Arg Arg Val Leu Cys Val Cys Pro Cys Ser His Ser  
1 5 10 15  
Ser Ser Ala Leu Pro Leu Gln Lys Val  
20 25

<210> 229  
<211> 16  
<212> PRT  
<213> Ascoris suum

<400> 229  
Leu Pro Asn Val Asn Trp Asp Glu Leu Met Ser Ile Pro Lys Ser Tyr  
1 5 10 15

<210> 230  
<211> 7  
<212> PRT  
<213> Caenorhabditis elegans or Ascoris suum

<400> 230  
Leu Asn Trp Ser Pro Ser Tyr  
1 5

<210> 231

<211> 16  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 231  
 Leu Glu Ser Phe Asn Trp Phe Ser Phe Val Ser Cys Pro Asp Ser Tyr  
 1 5 10 15

<210> 232  
 <211> 14  
 <212> PRT  
 <213> Ascoris suum

<400> 232  
 Ser Val Cys His Thr Pro Glu Gly Val Lys Pro Met Met Gly  
 1 5 10

<210> 233  
 <211> 6  
 <212> PRT  
 <213> Caenorhabditis elegans or Ascoris suum

<400> 233  
 Val His Pro Pro Met Gly  
 1 5

<210> 234  
 <211> 14  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 234  
 Thr Val Met His Asp Pro Met Ala Met Arg Pro Phe Met Gly  
 1 5 10

<210> 235  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 235  
 Ser Gly Phe Phe Asp Tyr Gly Ser Phe Ser Glu Ile Met Gln Pro Trp  
 1 5 10 15  
 Ala Gln Thr Val Val Val Gly Arg Ala Arg Leu Gly Gly Ile Pro Val  
 20 25 30  
 Gly Val Val Ala Val Glu Thr Arg Thr Val Glu Leu Ser Val Pro Ala  
 35 40 45  
 Asp Pro Ala Asn Leu Asp Ser Glu Ala Lys Ile Ile Gln Gln Ala Gly  
 50 55 60  
 Gln Val Trp Phe Pro Asp Ser Ala Phe Lys Thr Tyr Gln Ala Ile Lys  
 65 70 75 80  
 Asp Phe Asn Arg Glu Gly Leu Pro Leu Met Val Phe Ala Asn Trp Arg  
 85 90 95  
 Gly Phe Ser Gly Gly Met Lys Asp Met Tyr Asp Gln Val Leu Lys Phe  
 100 105 110

Gly	Ala	Tyr	Ile	Val	Asp	Gly	Leu	Arg	Glu	Cys	Ser	Gln	Pro	Val	Met
	115						120					125			
Val	Tyr	Ile	Pro	Pro	Gln	Ala	Glu	Leu	Arg	Gly	Gly	Ser	Trp	Val	Val
	130					135					140				
Ile	Asp	Pro	Thr	Ile	Asn	Pro	Arg	His	Met	Glu	Met	Tyr	Ala	Asp	Arg
145					150					155					160
Glu	Ser	Arg	Gly	Ser	Val	Leu	Glu	Pro	Glu	Gly	Thr	Val	Glu	Ile	Lys
				165					170					175	
Phe	Arg	Lys	Lys	Asp	Leu	Val	Lys	Thr	Met	Arg	Arg	Val	Asp	Pro	Val
			180					185					190		
Tyr	Ile	Arg	Leu	Ala											
	195														

<210> 236  
 <211> 109  
 <212> PRT  
 <213> Caenorhabditis elegans or Homo sapiens

Gly	Asp	Ser	Phe	Glu	Ile	Trp	Ala	Val	Gly	Arg	Ala	Arg	Leu	Gly	Ile
1				5					10					15	
Pro	Gly	Val	Val	Glu	Arg	Val	Pro	Ala	Asp	Pro	Ala	Ser	Gln	Ala	Gly
			20					25					30		
Gln	Val	Trp	Pro	Asp	Ser	Ala	Phe	Lys	Thr	Ala	Ile	Asp	Asn	Glu	Leu
		35					40					45			
Pro	Leu	Met	Ala	Arg	Gly	Phe	Ser	Gly	Gly	Lys	Asp	Met	Tyr	Asp	Val
	50					55					60				
Leu	Lys	Phe	Gly	Ala	Ile	Val	Asp	Leu	Pro	Val	Val	Tyr	Ile	Pro	Glu
65					70					75					80
Leu	Arg	Gly	Gly	Trp	Val	Asp	Ile	Pro	Ala	Asp	Ser	Arg	Gly	Leu	Glu
				85					90					95	
Pro	Val	Ile	Lys	Phe	Arg	Lys	Met	Arg	Asp	Pro	Tyr	Leu			
			100					105							

<210> 237  
 <211> 197  
 <212> PRT  
 <213> Caenorhabditis elegans

Thr	Gly	Ile	Cys	Asp	Thr	Met	Ser	Phe	Asp	Glu	Ile	Cys	Gly	Asp	Trp
1				5					10					15	
Ala	Lys	Ser	Ile	Val	Ala	Gly	Arg	Ala	Arg	Leu	Cys	Gly	Ile	Pro	Ile
			20					25					30		
Gly	Val	Val	Ser	Ser	Glu	Phe	Arg	Asn	Phe	Ser	Thr	Ile	Val	Pro	Ala
		35					40					45			
Asp	Pro	Ala	Ile	Asp	Gly	Ser	Gln	Val	Gln	Asn	Thr	Gln	Arg	Ala	Gly
	50					55					60				
Gln	Val	Trp	Tyr	Pro	Asp	Ser	Ala	Phe	Lys	Thr	Ala	Glu	Ala	Ile	Asn
65					70					75					80
Asp	Leu	Asn	Lys	Glu	Asn	Leu	Pro	Leu	Met	Ile	Ile	Ala	Ser	Leu	Arg
			85						90					95	
Gly	Phe	Ser	Gly	Gly	Gln	Lys	Asp	Met	Tyr	Asp	Met	Val	Leu	Lys	Phe
			100					105					110		
Gly	Ala	Gln	Ile	Val	Asp	Ala	Leu	Ala	Val	Tyr	Asn	Arg	Pro	Val	Ile
		115					120					125			
Val	Tyr	Ile	Pro	Glu	Ala	Gly	Glu	Leu	Arg	Gly	Gly	Ala	Trp	Ala	Val

130		135		140
Leu Asp Ser Lys Ile Arg	Pro Glu Phe Ile His	Leu Val Ala Asp Glu		
145	150	155	160	
Lys Ser Arg Gly Gly Ile	Leu Glu Pro Asn Ala	Val Val Gly Ile Lys		
	165	170	175	
Phe Arg Lys Pro Met Met	Met Glu Met Met Lys	Arg Ser Asp Pro Thr		
	180	185	190	
Tyr Ser Lys Leu Ser				
195				

<210> 238  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> VARIANT  
 <222> (1)...(124)  
 <223> Xaa = Any Amino Acid

<400> 238
Val Gly Tyr Pro Val Met Ile Lys Ala Ser Glu Gly Gly Gly Gly Lys
1 5 10 15
Gly Ile Arg Lys Val Asn Asn Ala Asp Asp Phe Pro Asn Leu Phe Arg
20 25 30
Gln Val Gln Ala Glu Val Pro Gly Ser Pro Ile Phe Val Met Arg Leu
35 40 45
Ala Lys Gln Ser Arg His Leu Glu Val Gln Ile Leu Ala Asp Gln Tyr
50 55 60
Gly Asn Ala Ile Ser Leu Phe Gly Arg Asp Cys Ser Val Gln Arg Arg
65 70 75 80
His Gln Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
85 90 95
Val Phe Glu His Met Glu Gln Cys Ala Val Lys Leu Ala Lys Met Val
100 105 110
Gly Tyr Val Ser Ala Gly Thr Val Glu Tyr Leu Tyr
115 120

<210> 239  
 <211> 68  
 <212> PRT  
 <213> Homo sapiens or Caenorhabditis elegans

<400> 239
Gly Pro Met Ile Lys Ala Ser Glu Gly Gly Gly Gly Lys Gly Ile Arg
1 5 10 15
Lys Asp Phe Phe Val Glu Val Gly Ser Pro Ile Phe Met Arg His Glu
20 25 30
Val Gln Leu Ala Asp Tyr Asn Ile Ser Arg Asp Cys Ser Gln Arg Arg
35 40 45
Gln Lys Met Ala Val Leu Ala Lys Val Gly Tyr Ser Ala Gly Thr Val
50 55 60
Glu Tyr Leu Tyr
65

<210> 240

<211> 124  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 240  
 Ile Gly Phe Pro Leu Met Ile Lys Ala Ser Glu Gly Gly Gly Gly Lys  
 1 5 10 15  
 Gly Ile Arg Lys Cys Thr Lys Val Glu Asp Phe Lys Ser Met Phe Glu  
 20 25 30  
 Glu Val Ala Gln Glu Val Gln Gly Ser Pro Ile Phe Leu Met Lys Cys  
 35 40 45  
 Val Asp Gly Ala Arg His Ile Glu Val Gln Leu Leu Ala Asp Arg Tyr  
 50 55 60  
 Glu Asn Val Ile Ser Val Tyr Thr Arg Asp Cys Ser Ile Gln Arg Arg  
 65 70 75 80  
 Cys Gln Lys Ile Ile Glu Glu Ala Pro Ala Ile Ile Ala Ser Ser His  
 85 90 95  
 Ile Arg Lys Ser Met Gln Glu Asp Ala Val Arg Leu Ala Lys Tyr Val  
 100 105 110  
 Gly Tyr Glu Ser Ala Gly Thr Val Glu Tyr Leu Tyr  
 115 120

<210> 241  
 <211> 116  
 <212> PRT  
 <213> Rat

<400> 241  
 Lys Glu Glu Gly Leu Gly Ala Glu Asn Leu Arg Gly Ser Gly Met Ile  
 1 5 10 15  
 Ala Gly Glu Ser Ser Leu Ala Tyr Asp Glu Ile Ile Thr Ile Ser Leu  
 20 25 30  
 Val Thr Cys Arg Ala Ile Gly Ile Gly Ala Tyr Leu Val Arg Leu Gly  
 35 40 45  
 Gln Arg Thr Ile Gln Val Glu Asn Ser His Leu Ile Leu Thr Gly Ala  
 50 55 60  
 Gly Ala Leu Asn Lys Val Leu Gly Arg Glu Val Tyr Thr Ser Asn Asn  
 65 70 75 80  
 Gln Leu Gly Gly Ile Gln Ile Met His Asn Asn Gly Val Thr His Cys  
 85 90 95  
 Thr Val Cys Asp Asp Phe Glu Gly Val Phe Thr Val Leu His Trp Leu  
 100 105 110  
 Ser Tyr Met Pro  
 115

<210> 242  
 <211> 65  
 <212> PRT  
 <213> Caenorhabditis elegans or Rat

<400> 242  
 Lys Glu Gly Glu Asn Leu Gly Ser Gly Ile Ala Gly Glu Ala Tyr Glu  
 1 5 10 15  
 Thr Val Thr Arg Gly Ile Gly Ala Tyr Arg Leu Arg Gln Ser His Leu  
 20 25 30  
 Ile Leu Thr Gly Ala Leu Asn Leu Gly Val Tyr Thr Ser Asn Asn Gln  
 35 40 45

Leu Gly Gly Met Asn Gly Val Thr His Val Asp Glu Gly Val Trp Ser  
 50 55 60  
 Pro  
 65

<210> 243  
 <211> 116  
 <212> PRT  
 <213> *Caenorhabditis elegans*

<400> 243  
 Lys Asn Glu Lys Ile Gly Val Glu Asn Leu Gln Gly Ser Gly Leu Ile  
 1 5 10 15  
 Ala Gly Glu Thr Ala Arg Ala Tyr Ala Glu Val Pro Thr Tyr Cys Tyr  
 20 25 30  
 Val Thr Gly Arg Ser Val Gly Ile Gly Ala Tyr Thr Ala Arg Leu Ala  
 35 40 45  
 His Arg Ile Val Gln His Lys Gln Ser His Leu Ile Leu Thr Gly Tyr  
 50 55 60  
 Glu Ala Leu Asn Thr Leu Leu Gly Lys Lys Val Tyr Thr Ser Asn Asn  
 65 70 75 80  
 Gln Leu Gly Gly Pro Glu Val Met Phe Arg Asn Gly Val Thr His Ala  
 85 90 95  
 Val Val Asp Asn Asp Leu Glu Gly Ile Ala Lys Val Ile Arg Trp Met  
 100 105 110  
 Ser Phe Leu Pro  
 115

<210> 244  
 <211> 119  
 <212> PRT  
 <213> *Homo sapiens*

<400> 244  
 His Val Ile Ala Ala Arg Ile Thr Ser Glu Asn Pro Asp Glu Gly Phe  
 1 5 10 15  
 Lys Pro Ser Ser Gly Thr Val Gln Glu Leu Asn Phe Arg Ser Asn Lys  
 20 25 30  
 Asn Val Trp Gly Tyr Phe Ser Val Ala Ala Ala Gly Gly Leu His Glu  
 35 40 45  
 Phe Ala Asp Ser Gln Phe Gly His Cys Phe Ser Trp Gly Glu Asn Arg  
 50 55 60  
 Glu Glu Ala Ile Ser Asn Met Val Val Ala Leu Lys Glu Leu Ser Ile  
 65 70 75 80  
 Arg Gly Asp Phe Arg Thr Thr Val Glu Tyr Leu Ile Lys Leu Leu Glu  
 85 90 95  
 Thr Glu Ser Phe Gln Leu Asn Arg Ile Asp Thr Gly Trp Leu Asp Arg  
 100 105 110  
 Leu Ile Ala Glu Lys Val Gln  
 115

<210> 245  
 <211> 59  
 <212> PRT  
 <213> *Caenorhabditis elegans* or *Homo sapiens*

<400> 245  
 His Ile Ala Ala Arg Ile Thr Glu Asn Pro Asp Phe Pro Ser Gly Val  
 1 5 10 15  
 Glu Asn Phe Ser Trp Tyr Phe Ser Val His Phe Ala Asp Ser Gln Phe  
 20 25 30  
 Gly His Phe Gly Arg Glu Ala Met Leu Lys Ile Arg Phe Thr Val Tyr  
 35 40 45  
 Leu Leu Phe Asn Thr Trp Leu Asp Ile Ala Lys  
 50 55

<210> 246  
 <211> 119  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 246  
 His Ala Ile Ala Ala Arg Ile Thr Cys Glu Asn Pro Asp Asp Ser Phe  
 1 5 10 15  
 Arg Pro Ser Thr Gly Lys Val Tyr Glu Ile Asn Phe Pro Ser Ser Gln  
 20 25 30  
 Asp Ala Trp Ala Tyr Phe Ser Val Gly Arg Gly Ser Ser Val His Gln  
 35 40 45  
 Phe Ala Asp Ser Gln Phe Gly His Ile Phe Thr Arg Gly Thr Ser Arg  
 50 55 60  
 Thr Glu Ala Met Asn Thr Met Cys Ser Thr Leu Lys His Met Thr Ile  
 65 70 75 80  
 Arg Ser Ser Phe Pro Thr Gln Val Asn Tyr Leu Val Asp Leu Met His  
 85 90 95  
 Asp Ala Asp Phe Ile Asn Asn Ala Phe Asn Thr Gln Trp Leu Asp Lys  
 100 105 110  
 Arg Ile Ala Met Lys Ile Lys  
 115

<210> 247  
 <211> 90  
 <212> PRT  
 <213> Rat

<400> 247  
 Pro Gly Gly Ala Asn Asn Asn Asn Tyr Ala Asn Val Glu Leu Ile Leu  
 1 5 10 15  
 Asp Ile Ala Lys Arg Ile Pro Val Gln Ala Val Trp Ala Gly Trp Gly  
 20 25 30  
 His Ala Ser Glu Asn Pro Lys Leu Pro Glu Leu Leu Leu Lys Asn Gly  
 35 40 45  
 Ile Ala Phe Met Gly Pro Pro Ser Gln Ala Met Trp Ala Leu Gly Asp  
 50 55 60  
 Lys Ile Ala Ser Ser Ile Val Ala Gln Thr Ala Gly Ile Pro Thr Leu  
 65 70 75 80  
 Pro Trp Ser Gly Ser Gly Leu Arg Val Asp  
 85 90

<210> 248  
 <211> 55  
 <212> PRT  
 <213> Caenorhabditis elegans or Rat

<400> 248

Pro Gly Asn Asn Asn Ala Asn Val Ile Leu Ala Val Ala Val Trp Ala  
1 5 10 15  
Gly Trp Gly His Ala Ser Glu Asn Pro Leu Pro Leu Ile Ala Phe Gly  
20 25 30  
Pro Pro Ala Met Leu Gly Asp Lys Ile Ala Ser Ile Ala Gln Thr Gly  
35 40 45  
Pro Thr Trp Ser Gly Ser Gly  
50 55

<210> 249

<211> 90

<212> PRT

<213> Caenorhabditis elegans

<400> 249

Pro Ser Gly Thr Asn Lys Asn Asn Phe Ala Asn Val Asp Glu Ile Leu  
1 5 10 15  
Lys His Ala Ile Lys Tyr Glu Val Asp Ala Val Trp Ala Gly Trp Gly  
20 25 30  
His Ala Ser Glu Asn Pro Asp Leu Pro Arg Arg Leu Asn Asp His Asn  
35 40 45  
Ile Ala Phe Ile Gly Pro Pro Ala Ser Ala Met Phe Ser Leu Gly Asp  
50 55 60  
Lys Ile Ala Ser Thr Ile Ile Ala Gln Thr Val Gly Val Pro Thr Val  
65 70 75 80  
Ala Trp Ser Gly Ser Gly Ile Thr Met Glu  
85 90

<210> 250

<211> 67

<212> PRT

<213> Caenorhabditis elegans

<400> 250

Val Ile Lys Asn Leu Gly Tyr Met Val Asp Asn His Gly Phe Val Pro  
1 5 10 15  
Asn Gly Gly Arg Val Tyr Tyr Leu Thr Arg Ser Gln Pro Pro Leu Leu  
20 25 30  
Thr Pro Met Val Tyr Glu Tyr Tyr Met Ser Thr Gly Asp Leu Asp Phe  
35 40 45  
Val Met Glu Ile Leu Pro Thr Leu Asp Lys Glu Tyr Glu Phe Trp Ile  
50 55 60  
Lys Asn Arg  
65

<210> 251

<211> 36

<212> PRT

<213> Caenorhabditis elegans

<400> 251

Ile Asn Gly Phe Val Pro Asn Gly Gly Arg Val Tyr Tyr Leu Arg Ser  
1 5 10 15  
Gln Pro Pro Pro Met Val Tyr Glu Tyr Tyr Thr Asp Val Pro Lys Glu  
20 25 30



Tyr Phe Trp Arg  
35

<210> 252  
<211> 67  
<212> PRT  
<213> Caenorhabditis elegans

<400> 252  
Met Ile Leu Asn Phe Ala His Ile Ile Glu Thr Tyr Gly Phe Val Pro  
1 5 10 15  
Asn Gly Gly Arg Val Tyr Tyr Leu Arg Arg Ser Gln Pro Pro Phe Phe  
20 25 30  
Ala Pro Met Val Tyr Glu Tyr Tyr Leu Ala Thr Gln Asp Ile Gln Leu  
35 40 45  
Val Ala Asp Leu Ile Pro Val Ile Glu Lys Glu Tyr Thr Phe Trp Ser  
50 55 60  
Glu Arg Arg  
65

<210> 253  
<211> 92  
<212> PRT  
<213> Caenorhabditis elegans

<400> 253  
Met Asp Ser Ile Arg Thr Trp Ser Ile Ile Pro Ala Asp Leu Asn Ala  
1 5 10 15  
Phe Met Cys Ala Asn Ala Arg Ile Leu Ala Ser Leu Tyr Glu Ile Ala  
20 25 30  
Gly Asp Phe Lys Lys Val Lys Val Phe Glu Gln Arg Tyr Thr Trp Ala  
35 40 45  
Lys Arg Glu Met Arg Glu Leu His Trp Asn Glu Thr Asp Gly Ile Trp  
50 55 60  
Tyr Asp Tyr Asp Ile Glu Leu Lys Thr His Ser Asn Gln Tyr Tyr Val  
65 70 75 80  
Ser Asn Ala Val Pro Leu Tyr Ala Lys Cys Tyr Asp  
85 90

<210> 254  
<211> 32  
<212> PRT  
<213> Caenorhabditis elegans

<400> 254  
Ile Thr Ile Pro Asp Leu Asn Ala Phe Cys Asn Ile Tyr Gly Lys Arg  
1 5 10 15  
Thr Trp Tyr Asp Tyr Thr His Ser Asn Ala Val Pro Leu Cys Tyr Asp  
20 25 30

<210> 255  
<211> 92  
<212> PRT  
<213> Caenorhabditis elegans

<400> 255

Ile	Ser	Thr	Ile	Glu	Thr	Thr	Asn	Ile	Val	Pro	Val	Asp	Leu	Asn	Ala
1				5					10					15	
Phe	Leu	Cys	Tyr	Asn	Met	Asn	Ile	Met	Gln	Leu	Phe	Tyr	Lys	Leu	Thr
			20				25						30		
Gly	Asn	Pro	Leu	Lys	His	Leu	Glu	Trp	Ser	Ser	Arg	Phe	Thr	Asn	Phe
		35					40					45			
Arg	Glu	Ala	Phe	Thr	Lys	Val	Phe	Tyr	Val	Pro	Ala	Arg	Lys	Gly	Trp
	50					55					60				
Tyr	Asp	Tyr	Asn	Leu	Arg	Thr	Leu	Thr	His	Asn	Thr	Asp	Phe	Phe	Ala
65					70					75					80
Ser	Asn	Ala	Val	Pro	Leu	Phe	Ser	Gln	Cys	Tyr	Asp				
			85						90						

<210> 256

<211> 102

<212> PRT

<213> Caenorhabditis elegans

<400> 256

Val	His	Asp	Tyr	Leu	Glu	Arg	Gln	Gly	Leu	Leu	Lys	Tyr	Thr	Lys	Gly
1				5					10					15	
Leu	Pro	Thr	Ser	Leu	Ala	Met	Ser	Ser	Thr	Gln	Gln	Trp	Asp	Lys	Glu
			20					25					30		
Asn	Ala	Trp	Pro	Pro	Met	Ile	His	Met	Val	Ile	Glu	Gly	Phe	Arg	Thr
		35					40					45			
Thr	Gly	Asp	Ile	Lys	Leu	Met	Lys	Val	Ala	Glu	Lys	Met	Ala	Thr	Ser
	50					55					60				
Trp	Leu	Thr	Gly	Thr	Tyr	Gln	Ser	Phe	Ile	Arg	Thr	His	Ala	Met	Phe
65					70					75					80
Glu	Lys	Tyr	Asn	Val	Thr	Pro	His	Thr	Glu	Glu	Thr	Ser	Gly	Gly	Gly
				85					90					95	
Gly	Gly	Glu	Tyr	Glu	Val										
			100												

<210> 257

<211> 37

<212> PRT

<213> Caenorhabditis elegans

<400> 257

Val	Gly	Gly	Pro	Thr	Ser	Gln	Gln	Trp	Asp	Asn	Trp	Pro	Met	His	Met
1				5					10					15	
Ile	Glu	Gly	Arg	Leu	Ala	Ala	Trp	Leu	Gln	Phe	Met	Glu	Lys	Tyr	Asn
			20					25					30		
Val	Gly	Gly	Glu	Val											
			35												

<210> 258

<211> 102

<212> PRT

<213> Caenorhabditis elegans

<400> 258

Val	Tyr	Asn	Glu	Met	Gln	Asn	Ser	Gly	Ala	Phe	Ser	Ile	Pro	Gly	Gly
1				5					10					15	

Ile	Pro	Thr	Ser	Met	Asn	Glu	Glu	Thr	Asn	Gln	Gln	Trp	Asp	Phe	Pro
			20					25					30		
Asn	Gly	Trp	Ser	Pro	Met	Asn	His	Met	Ile	Ile	Glu	Gly	Leu	Arg	Lys
	35						40					45			
Ser	Asn	Asn	Pro	Ile	Leu	Gln	Gln	Lys	Ala	Phe	Thr	Leu	Ala	Glu	Lys
	50					55					60				
Trp	Leu	Glu	Thr	Asn	Met	Gln	Thr	Phe	Asn	Val	Ser	Asp	Glu	Met	Trp
65					70					75					80
Glu	Lys	Tyr	Asn	Val	Lys	Glu	Pro	Leu	Gly	Lys	Leu	Ala	Thr	Gly	Gly
			85						90					95	
Glu	Tyr	Glu	Val	Gln	Val										
			100												

<210> 259  
 <211> 58  
 <212> PRT  
 <213> Caenorhabditis elegans

Tyr	Gln	Tyr	Lys	Ala	Lys	Leu	Lys	Val	Pro	Arg	Pro	Glu	Ser	Tyr	Arg
1				5					10					15	
Glu	Asp	Ser	Glu	Leu	Ala	Glu	His	Leu	Gln	Thr	Glu	Ala	Glu	Lys	Ile
			20					25					30		
Gln	Met	Trp	Ser	Glu	Ile	Ala	Ser	Ala	Ala	Glu	Thr	Gly	Trp	Asp	Phe
		35					40					45			
Ser	Thr	Arg	Trp	Phe	Ser	Gln	Asn	Gly	Asp						
	50					55									

<210> 260  
 <211> 29  
 <212> PRT  
 <213> Caenorhabditis elegans

Gln	Tyr	Pro	Arg	Pro	Glu	Ser	Arg	Glu	Asp	Ala	Glu	His	Thr	Lys	Gln
1				5					10					15	
Ser	Ala	Ala	Glu	Gly	Trp	Asp	Phe	Ser	Arg	Trp	Phe	Asp			
			20					25							

<210> 261  
 <211> 58  
 <212> PRT  
 <213> Caenorhabditis elegans

Phe	Gln	Tyr	Arg	Thr	Glu	Ala	Glu	Thr	Pro	Arg	Pro	Glu	Ser	Phe	Arg
1				5					10					15	
Glu	Asp	Val	Leu	Ser	Ala	Glu	His	Phe	Thr	Thr	Lys	Asp	Arg	Lys	Lys
			20					25					30		
Gln	Phe	Phe	Lys	Asp	Leu	Gly	Ser	Ala	Ala	Glu	Ser	Gly	Trp	Asp	Phe
		35					40					45			
Ser	Ser	Arg	Trp	Phe	Lys	Asn	His	Lys	Asp						
	50					55									

<210> 262

<211> 21  
<212> PRT  
<213> Caenorhabditis elegans

<400> 262  
Gln Thr Gly Phe Gly Trp Thr Asn Gly Val Ile Leu Asp Leu Leu Asp  
1 5 10 15  
Lys Tyr Gly Asp Gln  
20

<210> 263  
<211> 13  
<212> PRT  
<213> Caenorhabditis elegans

<400> 263  
Gln Gly Phe Gly Trp Thr Asn Gly Leu Asp Leu Tyr Asp  
1 5 10

<210> 264  
<211> 21  
<212> PRT  
<213> Caenorhabditis elegans

<400> 264  
Gln Ala Gly Phe Gly Trp Thr Asn Gly Ala Ala Leu Asp Leu Ile Phe  
1 5 10 15  
Thr Tyr Ser Asp Arg  
20

<210> 265  
<211> 24  
<212> PRT  
<213> Caenorhabditis elegans

<400> 265  
Ser Ser Ser Thr Ala Ser Lys Phe Ser Phe Ser Leu Ser Asn Ile Thr  
1 5 10 15  
Phe Val Val Phe Ile Leu Tyr Ile  
20

<210> 266  
<211> 10  
<212> PRT  
<213> Caenorhabditis elegans

<400> 266  
Ser Ser Ser Phe Ser Val Phe Leu Tyr Ile  
1 5 10

<210> 267  
<211> 24  
<212> PRT  
<213> Caenorhabditis elegans

<400> 267

Thr Ser Ser Ser Ser Ser Thr Phe Gly Tyr Ser Asn Ile Leu Thr Leu  
1 5 10 15  
Ile Thr Val Phe Val Leu Tyr Ile  
20

<210> 268

<211> 7

<212> PRT

<213> Caenorhabditis elegans

<400> 268

Gly Gly Glu Tyr Glu Val Gln  
1 5

<210> 269

<211> 7

<212> PRT

<213> Caenorhabditis elegans

<400> 269

Gly Gly Glu Tyr Glu Val Gln  
1 5

<210> 270

<211> 7

<212> PRT

<213> Caenorhabditis elegans

<400> 270

Gly Gly Glu Tyr Glu Val Gln  
1 5

<210> 271

<211> 18

<212> PRT

<213> Caenorhabditis elegans

<400> 271

Lys Thr His Ser Asn Gln Tyr Tyr Val Ser Asn Ala Val Pro Leu Tyr  
1 5 10 15  
Ala Lys

<210> 272

<211> 8

<212> PRT

<213> Caenorhabditis elegans

<400> 272

Lys Tyr Tyr Val Ser Pro Tyr Lys  
1 5

<210> 273  
 <211> 18  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 273  
 Lys Phe Thr Ala His Pro Tyr Tyr Val Ser Arg Thr Pro Pro Arg Tyr  
 1 5 10 15  
 His Lys

<210> 274  
 <211> 67  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 274  
 Val Ile Lys Asn Leu Gly Tyr Met Val Asp Asn His Gly Phe Val Pro  
 1 5 10 15  
 Asn Gly Gly Arg Val Tyr Tyr Leu Thr Arg Ser Gln Pro Pro Leu Leu  
 20 25 30  
 Thr Pro Met Val Tyr Glu Tyr Tyr Met Ser Thr Gly Asp Leu Asp Phe  
 35 40 45  
 Val Met Glu Ile Leu Pro Thr Leu Asp Lys Glu Tyr Glu Phe Trp Ile  
 50 55 60  
 Lys Asn Arg  
 65

<210> 275  
 <211> 43  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 275  
 Ile Asn Leu Met Val Asp Gly Phe Val Pro Asn Gly Gly Arg Val Tyr  
 1 5 10 15  
 Tyr Leu Arg Ser Gln Pro Pro Leu Met Val Tyr Glu Tyr Thr Asp Phe  
 20 25 30  
 Val Glu Leu Pro Thr Leu Lys Glu Phe Trp Arg  
 35 40

<210> 276  
 <211> 67  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 276  
 Met Ile Arg Asn Leu Ala Ser Met Val Asp Lys Tyr Gly Phe Val Pro  
 1 5 10 15  
 Asn Gly Gly Arg Val Tyr Tyr Leu Gln Arg Ser Gln Pro Pro Phe Leu  
 20 25 30  
 Ala Ala Met Val Tyr Glu Leu Tyr Glu Ala Thr Asn Asp Lys Ala Phe  
 35 40 45  
 Val Ala Glu Leu Leu Pro Thr Leu Leu Lys Glu Leu Asn Phe Trp Asn  
 50 55 60  
 Glu Lys Arg

65

<210> 277  
 <211> 84  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 277  
 Ile Ile Pro Ala Asp Leu Asn Ala Phe Met Cys Ala Asn Ala Arg Ile  
 1 5 10 15  
 Leu Ala Ser Leu Tyr Glu Ile Ala Gly Asp Phe Lys Lys Val Lys Val  
 20 25 30  
 Phe Glu Gln Arg Tyr Thr Trp Ala Lys Arg Glu Met Arg Glu Leu His  
 35 40 45  
 Trp Asn Glu Thr Asp Gly Ile Trp Tyr Asp Tyr Asp Ile Glu Leu Lys  
 50 55 60  
 Thr His Ser Asn Gln Tyr Tyr Val Ser Asn Ala Val Pro Leu Tyr Ala  
 65 70 75 80  
 Lys Cys Tyr Asp

<210> 278  
 <211> 31  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 278  
 Pro Asp Leu Asn Cys Asn Ile Leu Tyr Glu Gly Asp Lys Phe Asn Thr  
 1 5 10 15  
 Asp Gly Trp Tyr Asp Tyr His Tyr Ser Ala Val Pro Leu Cys Tyr  
 20 25 30

<210> 279  
 <211> 84  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 279  
 Val Leu Pro Val Asp Leu Asn Gly Leu Leu Cys Trp Asn Met Asp Ile  
 1 5 10 15  
 Met Glu Tyr Leu Tyr Glu Gln Ile Gly Asp Thr Lys Asn Ser Gln Ile  
 20 25 30  
 Phe Arg Asn Lys Arg Ala Asp Phe Arg Asp Thr Val Gln Asn Val Phe  
 35 40 45  
 Tyr Asn Arg Thr Asp Gly Thr Trp Tyr Asp Tyr Asn Leu Arg Thr Gln  
 50 55 60  
 Ser His Asn Pro Arg Phe Tyr Thr Ser Thr Ala Val Pro Leu Phe Thr  
 65 70 75 80  
 Asn Cys Tyr Asn

<210> 280  
 <211> 48  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 280

Tyr	Leu	Glu	Arg	Gln	Gly	Leu	Leu	Lys	Tyr	Thr	Lys	Gly	Leu	Pro	Thr
1				5				10						15	
Ser	Leu	Ala	Met	Ser	Ser	Thr	Gln	Gln	Trp	Asp	Lys	Glu	Asn	Ala	Trp
		20					25						30		
Pro	Pro	Met	Ile	His	Met	Val	Ile	Glu	Gly	Phe	Arg	Thr	Thr	Gly	Asp
		35					40					45			

<210> 281

<211> 20

<212> PRT

<213> Caenorhabditis elegans

<400> 281

Gly	Tyr	Gly	Pro	Thr	Ser	Ser	Gln	Gln	Trp	Asp	Asn	Trp	Pro	His	Met
1				5					10					15	
Ile	Glu	Gly	Arg												
			20												

<210> 282

<211> 48

<212> PRT

<213> Caenorhabditis elegans

<400> 282

Phe	Phe	Gln	Lys	Met	Gly	Val	Phe	Thr	Tyr	Pro	Gly	Gly	Ile	Pro	Thr
1				5					10					15	
Ser	Met	Ser	Gln	Glu	Ser	Asp	Gln	Gln	Trp	Asp	Phe	Pro	Asn	Gly	Trp
			20					25					30		
Ser	Pro	Asn	Asn	His	Met	Ile	Ile	Glu	Gly	Leu	Arg	Lys	Ser	Ala	Asn
		35					40					45			

<210> 283

<211> 18

<212> PRT

<213> Caenorhabditis elegans

<400> 283

Glu	Ile	Ala	Ser	Ala	Ala	Glu	Thr	Gly	Trp	Asp	Phe	Ser	Thr	Arg	Trp
1				5					10					15	
Phe	Ser														

<210> 284

<211> 15

<212> PRT

<213> Caenorhabditis elegans

<400> 284

Ala	Ser	Ala	Ala	Glu	Gly	Trp	Asp	Phe	Ser	Thr	Arg	Trp	Phe	Ser
1				5					10					15

<210> 285

<211> 18



<212> PRT

<213> Caenorhabditis elegans

<400> 285

Asp	Leu	Ala	Ser	Ala	Ala	Glu	Ser	Gly	Trp	Asp	Phe	Ser	Thr	Arg	Trp
1				5					10					15	
Phe	Ser														

<210> 286

<211> 40

<212> PRT

<213> Caenorhabditis elegans

<400> 286

Lys	Gln	Phe	Pro	Tyr	Tyr	Gln	Tyr	Lys	Ala	Lys	Leu	Lys	Val	Pro	Arg
1				5					10					15	
Pro	Glu	Ser	Tyr	Arg	Glu	Asp	Ser	Glu	Leu	Ala	Glu	His	Leu	Gln	Thr
			20					25					30		
Glu	Ala	Glu	Lys	Ile	Gln	Met	Trp								
		35					40								

<210> 287

<211> 18

<212> PRT

<213> Caenorhabditis elegans

<400> 287

Lys	Phe	Tyr	Gln	Tyr	Lys	Val	Pro	Arg	Pro	Glu	Ser	Tyr	Arg	Asp	Leu
1				5					10					15	
Ala	Gln														

<210> 288

<211> 40

<212> PRT

<213> Caenorhabditis elegans

<400> 288

Lys	Ser	Phe	Lys	Val	Tyr	Gln	Tyr	Lys	Thr	Ala	Ser	Asn	Val	Pro	Arg
1				5					10					15	
Pro	Glu	Ser	Tyr	Arg	Val	Asp	Thr	Gln	Asn	Ser	Ala	Lys	Leu	Ala	Asn
			20					25					30		
Gly	Ala	Asp	Gln	Gln	Gln	Phe	Tyr								
		35					40								

<210> 289

<211> 21

<212> PRT

<213> Caenorhabditis elegans

<400> 289

Gln	Thr	Gly	Phe	Gly	Trp	Thr	Asn	Gly	Val	Ile	Leu	Asp	Leu	Leu	Asp
1				5					10					15	
Lys	Tyr	Gly	Asp	Gln											

<210> 290  
 <211> 14  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 290  
 Gln Gly Phe Gly Trp Asn Gly Ile Leu Asp Leu Leu Tyr Asp  
 1 5 10

<210> 291  
 <211> 21  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 291  
 Gln Asp Gly Phe Gly Trp Ser Asn Gly Ala Ile Leu Asp Leu Leu Leu  
 1 5 10 15  
 Thr Tyr Asn Asp Arg  
 20

<210> 292  
 <211> 27  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 292  
 Tyr Gly Asp Gln Phe Ala Ser Ser Ser Thr Ala Ser Lys Phe Ser Phe  
 1 5 10 15  
 Ser Leu Ser Asn Ile Thr Phe Val Val Phe Ile  
 20 25

<210> 293  
 <211> 11  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 293  
 Tyr Phe Ala Ser Ser Ser Ala Ser Phe Ser Phe  
 1 5 10

<210> 294  
 <211> 26  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 294  
 Tyr Asn Pro Phe Ala Ser Ser Ser Asp Ala Ser Ser Cys Pro Phe Ser  
 1 5 10 15  
 Thr Asn Ser Val Ile Phe Ser Ile Leu Val  
 20 25

<210> 295  
<211> 9  
<212> PRT  
<213> Caenorhabditis elegans

<400> 295  
Gly Gly Gly Gly Glu Tyr Glu Val Gln  
1 5

<210> 296  
<211> 7  
<212> PRT  
<213> Caenorhabditis elegans

<400> 296  
Gly Gly Gly Glu Tyr Val Gln  
1 5

<210> 297  
<211> 9  
<212> PRT  
<213> Caenorhabditis elegans

<400> 297  
Gly Ser Gly Gly Glu Tyr Asp Val Gln  
1 5

<210> 298  
<211> 14  
<212> PRT  
<213> Caenorhabditis elegans

<400> 298  
Asn Gln Tyr Tyr Val Ser Asn Ala Val Pro Leu Tyr Ala Lys  
1 5 10

<210> 299  
<211> 7  
<212> PRT  
<213> Caenorhabditis elegans

<400> 299  
Asn Tyr Tyr Val Leu Tyr Lys  
1 5

<210> 300  
<211> 14  
<212> PRT  
<213> Caenorhabditis elegans

<400> 300  
Asn His Tyr Tyr Ile Ile Gln Met Val Ser Leu Tyr Thr Lys  
1 5 10

<210> 301  
 <211> 30  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 301  
 Asp Gln Phe Ala Ser Ser Ser Thr Ala Ser Lys Phe Ser Phe Ser Leu  
 1 5 10 15  
 Ser Asn Ile Thr Phe Val Val Phe Ile Leu Tyr Ile Phe Ser  
 20 25 30

<210> 302  
 <211> 11  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 302  
 Asp Gln Phe Ser Ser Lys Phe Ser Phe Phe Ser  
 1 5 10

<210> 303  
 <211> 30  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 303  
 Asp Gln Phe Val Ile Ser Phe Ile Cys Ser Lys Phe Ser Ser Lys Asn  
 1 5 10 15  
 Lys Lys Leu Tyr Phe Cys Pro Ser His Phe Ser Leu Phe Ser  
 20 25 30

<210> 304  
 <211> 9  
 <212> PRT  
 <213> Caenorhabditis elegans

<220>  
 <221> VARIANT  
 <222> (1)...(9)  
 <223> Xaa = Any Amino Acid

<400> 304  
 Gly Trp Asp Xaa Xaa Ile Ala Pro Lys  
 1 5

<210> 305  
 <211> 62  
 <212> PRT  
 <213> Mus musculus

<400> 305  
 Leu Cys Lys Glu Gly Ile Ser Asp Gly Ala Thr Met Lys Thr Phe Cys  
 1 5 10 15  
 Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val Leu Glu Asp Asn Asp Tyr  
 20 25 30

Gly	Arg	Ala	Val	Asp	Trp	Trp	Gly	Leu	Gly	Val	Val	Met	Tyr	Glu	Met
		35					40					45			
Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	Asn	Gln	Asp	His	Glu	Arg		
	50					55					60				

<210> 306  
 <211> 9  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 306  
 Gln Ala Leu Thr Gln Met Asn Pro Lys  
 1 5

<210> 307  
 <211> 11  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 307  
 Gln Ala Leu Thr Gln Cys Val Asp Ser Met Arg  
 1 5 10

<210> 308  
 <211> 248  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 308  
 Ile Phe Arg Thr Ala Val Ser Ser Asn Arg Cys Arg Thr Glu Tyr Gln  
 1 5 10 15  
 Asn Ile Asp Leu Asp Cys Ala Tyr Ile Thr Asp Arg Ile Ile Ala Ile  
 20 25 30  
 Gly Tyr Pro Ala Thr Gly Ile Glu Ala Asn Phe Arg Asn Ser Lys Val  
 35 40 45  
 Gln Thr Gln Gln Phe Leu Thr Arg Arg His Gly Lys Gly Asn Val Lys  
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 Val Phe Asn Leu Arg Gly Gly Tyr Tyr Tyr Asp Ala Asp Asn Phe Asp  
 65 70 75 80  
 Gly Asn Val Ile Cys Phe Asp Met Thr Asp His His Pro Pro Ser Leu  
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 Glu Leu Met Ala Pro Phe Cys Arg Glu Ala Lys Glu Trp Leu Glu Ala  
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 Asp Asp Lys His Val Ile Ala Val His Cys Lys Ala Gly Lys Gly Arg  
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 Thr Gly Val Met Ile Cys Ala Leu Leu Ile Tyr Ile Asn Phe Tyr Pro  
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 Ser Pro Arg Gln Ile Leu Asp Tyr Tyr Ser Ile Ile Thr Arg Lys Asn  
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 Asn Lys Gly Val Thr Ile Pro Ser Gln Arg Arg Tyr Ile Tyr Tyr Tyr  
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 His Lys Leu Arg Glu Arg Glu Leu Asn Tyr Leu Pro Leu Arg Met Gln  
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 Leu Ile Gly Val Tyr Val Glu Arg Pro Pro Lys Thr Trp Gly Gly Gly  
 195 200 205  
 Ser Lys Ile Lys Val Glu Val Gly Asn Gly Ser Thr Ile Leu Phe Lys

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 <212> PRT  
 <213> Homo sapiens

<400> 309

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Gly Phe Pro Ala Glu Arg Leu Glu Gly Val Tyr Arg Asn Asn Ile Asp	
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Asp Val Val Arg Phe Leu Asp Ser Lys His Lys Asn His Tyr Lys Ile	
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Tyr Asn Leu Cys Ala Glu Arg His Tyr Asp Thr Ala Lys Phe Asn Cys	
65 70 75 80	
Arg Val Ala Gln Tyr Pro Phe Glu Asp His Asn Pro Pro Gln Leu Glu	
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Lys Gly Val Thr Ile Pro Ser Gln Arg Arg Tyr Val Tyr Tyr Tyr Ser	
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Tyr Leu Leu Lys Asn His Leu Asp Tyr Arg Pro Val Ala Leu Leu Phe	
180 185 190	
His Lys Met Met Phe Glu Thr Ile Pro Met Phe Ser Gly Gly Thr Cys	
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<210> 310  
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 <213> Caenorhabditis elegans

<400> 310

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35 40 45	

Phe	Arg	Thr	Ala	Val	Ser	Ser	Asn	Arg	Cys	Arg	Thr	Glu	Tyr	Gln	Asn	
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 <211> 3304  
 <212> DNA  
 <213> *Caenorhabditis elegans*

<400> 311

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 <212> DNA  
 <213> Caenorhabditis elegans

<400> 312

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 <213> Caenorhabditis elegans

<400> 313

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Val	Ser	Glu	Asp	Ile	Ser	Lys	Met	Ile	Ala	Asn	Leu	Pro	Asp	His	Thr
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Leu	Asp	Ala	Asp	His	Pro	Gly	Phe	Lys	Asp	Thr	Glu	Tyr	Arg	Gln	Arg
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His	Glu	Arg	Phe	Lys	Val	Tyr	Gly	Ala	Gly	Leu	Leu	Ser	Ser	Ala	Gly
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 <212> DNA

<213> Caenorhabditis elegans

<400> 314

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agaggaagat	ttgaagaagc	ttgcaacact	ctacttcttt	tccattgaat	ttgggtctctc	420
gtctgatgac	gctgccgatt	ctccagtaaa	agaaaatgga	tcaaatacatg	aaagatttaa	480
agtatacga	gcaggacttc	tgagcagtgc	tggcgagttg	caacatgccg	ttgagggtag	540
tgcaaccatt	attcgttttg	atccggatcg	tggtgttgag	caagaatgtc	tcattactac	600
tttccagtca	gcgtatttct	atactagaaa	ttttgaagag	gccagcaga	aactcagaat	660
gttcaccaac	aacatgaaac	gtcccttcat	tggttcgttac	aaccataca	cagaaagcgt	720
cgaagttctc	aacaactccc	gttccattat	gttggcagtg	aactctctcc	gctcagacat	780
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<210> 315

<211> 45

<212> PRT

<213> Caenorhabditis elegans

<400> 315

Met	Asp	Ser	Leu	Phe	Gln	Met	Ala	Ser	Ala	Met	Lys	Phe	Gln	Tyr	Tyr
1				5					10					15	
Ser	Lys	Lys	Ala	Ala	Gly	Lys	Thr	Met	Ser	Asn	Ser	Val	Lys	Asn	Trp
			20					25					30		
Ile	Pro	Cys	Ser	Pro	Ser	Arg	Arg	Ile	Leu	Ile	Ser	Ser			
		35					40					45			

<210> 316

<211> 466

<212> DNA

<213> Caenorhabditis elegans

<400> 316

attcggcatg	agcatggagc	ttcgagtcct	agagaacaca	aaacgttccc	ggcggaaacct	60
gggtctggac	tgcgacgaga	ctcaagcgag	tcccgtctgt	gccgatatcc	cctcacagtg	120
gactttgagg	ctttcggtctg	ggactggatc	atcgacaccta	agcgctacaa	ggccaactac	180
tgctccggcc	agtgggagta	catgttcatg	caaaaatatc	cgcataccca	tttggtgcag	240
caggccaatc	caagaggtta	tgctgggccc	tggtgtaccc	ccaccaagat	gtccccaatc	300
aacatgctct	acttcaatga	caagcagcag	attatctacg	gcaagatccc	tggcatgggtg	360
gtggatcgct	gtggctgctc	ttaagggtggg	ggatagagga	tgcttcccc	acagaccgta	420
ccccaaagacc	catagccctg	cccaatccac	cgctgatcc	aaacat		466

<210> 317

<211> 128

<212> PRT

<213> Caenorhabditis elegans

<400> 317

Ile	Arg	His	Glu	His	Gly	Ala	Ser	Ser	Pro	Arg	Glu	His	Lys	Thr	Phe
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Pro	Ala	Glu	Pro	Gly	Ser	Gly	Leu	Arg	Arg	Asp	Ser	Ser	Glu	Ser	Arg
			20					25					30		
Cys	Cys	Arg	Tyr	Pro	Leu	Thr	Val	Asp	Phe	Glu	Ala	Phe	Gly	Trp	Asp
		35					40					45			

Trp	Ile	Ile	Ala	Pro	Lys	Arg	Tyr	Lys	Ala	Asn	Tyr	Cys	Ser	Gly	Gln
50						55				60					
Trp	Glu	Tyr	Met	Phe	Met	Gln	Lys	Tyr	Pro	His	Thr	His	Leu	Val	Gln
65					70				75						80
Gln	Ala	Asn	Pro	Arg	Gly	Tyr	Ala	Gly	Pro	Cys	Cys	Thr	Pro	Thr	Lys
				85				90						95	
Met	Ser	Pro	Ile	Asn	Met	Leu	Tyr	Phe	Asn	Asp	Lys	Gln	Gln	Ile	Ile
			100					105					110		
Tyr	Gly	Lys	Ile	Pro	Leu	Ala	Met	Val	Val	Asp	Arg	Cys	Gly	Cys	Ser
		115					120					125			

<210> 318  
 <211> 8  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 6  
 <223> n = c o r t

<400> 318  
 caaaanaa

8

<210> 319  
 <211> 20  
 <212> DNA  
 <213> Caenorhabditis elegans

<400> 319  
 ccactatggc cgagatttcc

20

<210> 320  
 <211> 44  
 <212> DNA  
 <213> Caenorhabditis elegans

<400> 320  
 ccagtgaaaa gttcttctcc tttcttctc ttctcgaatt cgga

44

<210> 321  
 <211> 21  
 <212> DNA  
 <213> Caenorhabditis elegans

<400> 321  
 cttcctcttc tcgaattcgg c

21

<210> 322  
 <211> 8  
 <212> PRT  
 <213> Caenorhabditis elegans

<400> 322  
 Gly Arg Lys Gly Phe Pro His Val  
 1 5

<210> 323  
 <211> 7  
 <212> PRT  
 <213> Caenorhabditis elegans

<220>  
 <221> VARIANT  
 <222> (1)...(7)  
 <223> Xaa = Any Amino Acid

<400> 323  
 Arg Xaa Xaa Ile Xaa Xaa Gly  
 1 5

<210> 324  
 <211> 7  
 <212> PRT  
 <213> Caenorhabditis elegans or Homo sapiens

<400> 324  
 Cys Gly Cys Cys Cys Cys Cys  
 1 5

<210> 325  
 <211> 79  
 <212> PRT  
 <213> Homo sapiens or Caenorhabditis elegans

<400> 325  
 Val Leu Asp Asp Tyr Gly Arg Val Asp Trp Trp Gly Gly Val Val Met  
 1 5 10 15  
 Tyr Glu Met Met Cys Gly Arg Leu Pro Phe Tyr Asp His Lys Leu Phe  
 20 25 30  
 Glu Leu Ile Arg Phe Pro Leu Glu Ala Leu Leu Gly Leu Leu Lys Asp  
 35 40 45  
 Pro Thr Gln Arg Leu Gly Gly Gly Glu Asp Ala Glu Ile Phe Phe Trp  
 50 55 60  
 Tyr Lys Pro Pro Lys Pro Val Ser Glu Thr Asp Thr Tyr Phe Asp  
 65 70 75

<210> 326  
 <211> 48  
 <212> PRT  
 <213> Homo sapiens or Caenorhabditis elegans

<400> 326  
 Thr Met Phe Leu Lys Leu Gly Lys Gly Thr Phe Gly Lys Val Ile Leu  
 1 5 10 15  
 Lys Glu Lys Thr Tyr Ala Lys Ile Leu Lys Lys Val Ile Ala Glu Val  
 20 25 30  
 Ala His Thr Leu Thr Glu Asn Arg Val Leu Gln His Pro Phe Leu Thr  
 35 40 45

<210> 327  
 <211> 27

<212> DNA  
 <213> Caenorhabditis elegans

<400> 327  
 caagcgttgaa ctcaaatgaa tccaaaa

27

<210> 328  
 <211> 55  
 <212> DNA  
 <213> Caenorhabditis elegans

<400> 328  
 caagcgttgaa ctcaatgcgt tgactcaatg cgttgactcg ttgacgaatc caaaa

55

<210> 329  
 <211> 530  
 <212> PRT  
 <213> C. elegans

<400> 329  
 Met Asn Asp Ser Ile Asp Asp Asp Phe Pro Pro Glu Pro Arg Gly Arg  
 1 5 10 15  
 Cys Tyr Thr Trp Pro Met Gln Gln Tyr Ile Tyr Gln Glu Ser Ser Ala  
 20 25 30  
 Thr Ile Pro His His His Leu Asn Gln His Asn Asn Pro Tyr His Pro  
 35 40 45  
 Met His Pro His His Gln Leu Pro His Met Gln Gln Leu Pro Gln Pro  
 50 55 60  
 Leu Leu Asn Leu Asn Met Thr Thr Leu Thr Ser Ser Gly Ser Ser Val  
 65 70 75 80  
 Ala Ser Ser Ile Gly Gly Gly Ala Gln Cys Ser Pro Cys Ala Ser Gly  
 85 90 95  
 Ser Ser Thr Ala Ala Thr Asn Ser Ser Gln Gln Gln Gln Thr Val Gly  
 100 105 110  
 Gln Met Leu Ala Ala Ser Val Pro Cys Ser Ser Ser Gly Met Thr Leu  
 115 120 125  
 Gly Met Ser Leu Asn Leu Ser Gln Gly Gly Gly Pro Met Pro Ala Lys  
 130 135 140  
 Lys Lys Arg Cys Arg Lys Lys Pro Thr Asp Gln Leu Ala Gln Lys Lys  
 145 150 155 160  
 Pro Asn Pro Trp Gly Glu Glu Ser Tyr Ser Asp Ile Ile Ala Lys Ala  
 165 170 175  
 Leu Glu Ser Ala Pro Asp Gly Arg Leu Lys Leu Asn Glu Ile Tyr Gln  
 180 185 190  
 Trp Phe Ser Asp Asn Ile Pro Tyr Phe Gly Glu Arg Ser Ser Pro Glu  
 195 200 205  
 Glu Ala Ala Gly Trp Lys Asn Ser Ile Arg His Asn Leu Ser Leu His  
 210 215 220  
 Ser Arg Phe Met Arg Ile Gln Asn Glu Gly Ala Gly Lys Ser Ser Trp  
 225 230 235 240  
 Trp Val Ile Asn Pro Asp Ala Lys Pro Gly Arg Asn Pro Arg Arg Thr  
 245 250 255  
 Arg Glu Arg Ser Asn Thr Ile Glu Thr Thr Thr Lys Ala Gln Leu Glu  
 260 265 270  
 Lys Ser Arg Arg Gly Ala Lys Lys Arg Ile Lys Glu Arg Ala Leu Met  
 275 280 285  
 Gly Ser Leu His Ser Thr Leu Asn Gly Asn Ser Ile Ala Gly Ser Ile  
 290 295 300  
 Gln Thr Ile Ser His Asp Leu Tyr Asp Asp Asp Ser Met Gln Gly Ala

305					310					315					320
Phe	Asp	Asn	Val	Pro	Ser	Ser	Phe	Arg	Pro	Arg	Thr	Gln	Ser	Asn	Leu
					325					330				335	
Ser	Ile	Pro	Gly	Ser	Ser	Ser	Arg	Val	Ser	Pro	Ala	Ile	Gly	Ser	Asp
					340					345				350	
Ile	Tyr	Asp	Asp	Leu	Glu	Phe	Pro	Ser	Trp	Val	Gly	Glu	Ser	Val	Pro
		355					360					365			
Ala	Ile	Pro	Ser	Asp	Ile	Val	Asp	Arg	Thr	Asp	Gln	Met	Arg	Ile	Asp
	370					375					380				
Ala	Thr	Thr	His	Ile	Gly	Gly	Val	Gln	Ile	Lys	Gln	Glu	Ser	Lys	Pro
385					390					395					400
Ile	Lys	Thr	Glu	Pro	Ile	Ala	Pro	Pro	Pro	Ser	Tyr	His	Glu	Leu	Asn
				405					410					415	
Ser	Val	Arg	Gly	Ser	Cys	Ala	Gln	Asn	Pro	Leu	Leu	Arg	Asn	Pro	Ile
			420					425					430		
Val	Pro	Ser	Thr	Asn	Phe	Lys	Pro	Met	Pro	Leu	Pro	Gly	Ala	Tyr	Gly
	435						440					445			
Asn	Tyr	Gln	Asn	Gly	Gly	Ile	Thr	Pro	Ile	Asn	Trp	Leu	Ser	Thr	Ser
	450					455					460				
Asn	Ser	Ser	Pro	Leu	Pro	Gly	Ile	Gln	Ser	Cys	Gly	Ile	Val	Ala	Ala
465					470					475					480
Gln	His	Thr	Val	Ala	Ser	Ser	Ser	Ala	Leu	Pro	Ile	Asp	Leu	Glu	Asn
			485					490						495	
Leu	Thr	Leu	Pro	Asp	Gln	Pro	Leu	Met	Asp	Thr	Met	Asp	Val	Asp	Ala
			500				505						510		
Leu	Ile	Arg	His	Glu	Leu	Ser	Gln	Ala	Gly	Gly	Gln	His	Ile	His	Phe
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Asp	Leu														
	530														

<210> 330  
 <211> 673  
 <212> PRT  
 <213> Homo sapiens

<400> 330

Met	Ala	Glu	Ala	Pro	Ala	Ser	Pro	Ala	Pro	Leu	Ser	Pro	Leu	Glu	Val
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Glu	Leu	Asp	Pro	Glu	Phe	Glu	Pro	Gln	Ser	Arg	Pro	Arg	Ser	Cys	Thr
			20					25					30		
Trp	Pro	Leu	Gln	Arg	Pro	Glu	Leu	Gln	Ala	Ser	Pro	Ala	Lys	Pro	Ser
		35				40						45			
Gly	Glu	Thr	Ala	Ala	Asp	Ser	Met	Ile	Pro	Glu	Glu	Glu	Asp	Asp	Glu
	50					55					60				
Asp	Asp	Glu	Asp	Gly	Gly	Gly	Arg	Ala	Gly	Ser	Ala	Met	Ala	Ile	Gly
65				70					75					80	
Gly	Gly	Gly	Gly	Ser	Gly	Thr	Leu	Gly	Ser	Gly	Leu	Leu	Leu	Glu	Asp
				85				90						95	
Ser	Ala	Arg	Val	Leu	Ala	Pro	Gly	Gly	Gln	Asp	Pro	Gly	Ser	Gly	Pro
			100				105						110		
Ala	Thr	Ala	Ala	Gly	Gly	Leu	Ser	Gly	Gly	Thr	Gln	Ala	Leu	Leu	Gln
	115					120						125			
Pro	Gln	Gln	Pro	Leu	Pro	Pro	Pro	Gln	Pro	Gly	Ala	Ala	Gly	Gly	Ser
	130				135						140				
Gly	Gln	Pro	Arg	Lys	Cys	Ser	Ser	Arg	Arg	Asn	Ala	Trp	Gly	Asn	Leu
145				150					155					160	
Ser	Tyr	Ala	Asp	Leu	Ile	Thr	Arg	Ala	Ile	Glu	Ser	Ser	Pro	Asp	Lys
			165					170						175	



Arg	Leu	Thr	Leu	Ser	Gln	Ile	Tyr	Glu	Trp	Met	Val	Arg	Cys	Val	Pro
			180					185					190		
Tyr	Phe	Lys	Asp	Lys	Gly	Asp	Ser	Asn	Ser	Ser	Ala	Gly	Trp	Lys	Asn
		195					200					205			
Ser	Ile	Arg	His	Asn	Leu	Ser	Leu	His	Ser	Arg	Phe	Met	Arg	Val	Gln
	210					215					220				
Asn	Glu	Gly	Thr	Gly	Lys	Ser	Ser	Trp	Trp	Ile	Ile	Asn	Pro	Asp	Gly
225					230					235					240
Gly	Lys	Ser	Gly	Lys	Ala	Pro	Arg	Arg	Arg	Ala	Val	Ser	Met	Asp	Asn
				245				250						255	
Ser	Asn	Lys	Tyr	Thr	Lys	Ser	Arg	Gly	Arg	Ala	Ala	Lys	Lys	Lys	Ala
			260					265					270		
Ala	Leu	Gln	Thr	Ala	Pro	Glu	Ser	Ala	Asp	Asp	Ser	Pro	Ser	Gln	Leu
		275					280					285			
Ser	Lys	Trp	Pro	Gly	Ser	Pro	Thr	Ser	Arg	Ser	Ser	Asp	Glu	Leu	Asp
	290					295					300				
Ala	Trp	Thr	Asp	Phe	Arg	Ser	Arg	Thr	Asn	Ser	Asn	Ala	Ser	Thr	Val
305					310					315					320
Ser	Gly	Arg	Leu	Ser	Pro	Ile	Met	Ala	Ser	Thr	Glu	Leu	Asp	Glu	Val
				325				330						335	
Gln	Asp	Asp	Asp	Ala	Pro	Leu	Ser	Pro	Met	Leu	Tyr	Ser	Ser	Ser	Ala
			340					345					350		
Ser	Leu	Ser	Pro	Ser	Val	Ser	Lys	Pro	Cys	Thr	Val	Glu	Leu	Pro	Arg
		355					360					365			
Leu	Thr	Asp	Met	Ala	Gly	Thr	Met	Asn	Leu	Asn	Asp	Gly	Leu	Thr	Glu
	370					375					380				
Asn	Leu	Met	Asp	Asp	Leu	Leu	Asp	Asn	Ile	Thr	Leu	Pro	Pro	Ser	Gln
385					390					395					400
Pro	Ser	Pro	Thr	Gly	Gly	Leu	Met	Gln	Arg	Ser	Ser	Ser	Phe	Pro	Tyr
				405				410						415	
Thr	Thr	Lys	Gly	Ser	Gly	Leu	Gly	Ser	Pro	Thr	Ser	Ser	Phe	Asn	Ser
			420					425					430		
Thr	Val	Phe	Gly	Pro	Ser	Ser	Leu	Asn	Ser	Leu	Arg	Gln	Ser	Pro	Met
		435					440					445			
Gln	Thr	Ile	Gln	Glu	Asn	Lys	Pro	Ala	Thr	Phe	Ser	Ser	Met	Ser	His
	450					455				460					
Tyr	Gly	Asn	Gln	Thr	Leu	Gln	Asp	Leu	Leu	Thr	Ser	Asp	Ser	Leu	Ser
465					470					475					480
His	Ser	Asp	Val	Met	Met	Thr	Gln	Ser	Asp	Pro	Leu	Met	Ser	Gln	Ala
				485					490					495	
Ser	Thr	Ala	Val	Ser	Ala	Gln	Asn	Ser	Arg	Arg	Asn	Val	Met	Leu	Arg
		500						505					510		
Asn	Asp	Pro	Met	Met	Ser	Phe	Ala	Ala	Gln	Pro	Asn	Gln	Gly	Ser	Leu
		515					520					525			
Val	Asn	Gln	Asn	Leu	Leu	His	His	Gln	His	Gln	Thr	Gln	Gly	Ala	Leu
	530					535					540				
Gly	Gly	Ser	Arg	Ala	Leu	Ser	Asn	Ser	Val	Ser	Asn	Met	Gly	Leu	Ser
545					550					555					560
Glu	Ser	Ser	Ser	Leu	Gly	Ser	Ala	Lys	His	Gln	Gln	Gln	Ser	Pro	Val
				565				570						575	
Ser	Gln	Ser	Met	Gln	Thr	Leu	Ser	Asp	Ser	Leu	Ser	Gly	Ser	Ser	Leu
			580					585					590		
Tyr	Ser	Thr	Ser	Ala	Asn	Leu	Pro	Val	Met	Gly	His	Glu	Lys	Phe	Pro
		595				600						605			
Ser	Asp	Leu	Asp	Leu	Asp	Met	Phe	Asn	Gly	Ser	Leu	Glu	Cys	Asp	Met
	610					615					620				
Glu	Ser	Ile	Ile	Arg	Ser	Glu	Leu	Met	Asp	Ala	Asp	Gly	Leu	Asp	Phe
625					630					635					640
Asn	Phe	Asp	Ser	Leu	Ile	Ser	Thr	Gln	Asn	Val	Val	Gly	Leu	Asn	Val

				645					650					655		
Gly	Asn	Phe	Thr	Gly	Ala	Lys	Gln	Ala	Ser	Ser	Gln	Ser	Trp	Val	Pro	
			660					665					670			
Gly																

<210> 331  
 <211> 501  
 <212> PRT  
 <213> Homo sapiens

<400> 331

Met	Arg	Ile	Gln	Pro	Gln	Lys	Ala	Ala	Ala	Ile	Ile	Asp	Leu	Asp	Pro	
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			20					25					30			
Arg	Pro	Glu	Ile	Ala	Asn	Gln	Pro	Ser	Glu	Pro	Pro	Glu	Val	Glu	Pro	
		35				40						45				
Asp	Leu	Gly	Glu	Lys	Val	His	Thr	Glu	Gly	Arg	Ser	Glu	Pro	Ile	Leu	
50						55					60					
Leu	Pro	Ser	Arg	Leu	Ser	Glu	Pro	Ala	Gly	Gly	Pro	Gln	Pro	Gly	Ile	
65					70				75						80	
Leu	Gly	Ala	Val	Thr	Gly	Pro	Arg	Lys	Gly	Gly	Ser	Arg	Arg	Asn	Ala	
			85					90					95			
Trp	Gly	Asn	Gln	Ser	Tyr	Ala	Glu	Phe	Ile	Ser	Gln	Ala	Ile	Glu	Ser	
			100					105					110			
Ala	Pro	Glu	Lys	Arg	Leu	Thr	Leu	Ala	Gln	Ile	Tyr	Glu	Trp	Met	Val	
		115					120					125				
Arg	Thr	Val	Pro	Tyr	Phe	Lys	Asp	Lys	Gly	Asp	Ser	Asn	Ser	Ser	Ala	
130						135					140					
Gly	Trp	Lys	Asn	Ser	Ile	Arg	His	Asn	Leu	Ser	Leu	His	Ser	Lys	Phe	
145				150					155						160	
Ile	Lys	Val	His	Asn	Glu	Ala	Thr	Gly	Lys	Ser	Ser	Trp	Trp	Met	Leu	
			165					170						175		
Asn	Pro	Glu	Gly	Gly	Lys	Ser	Gly	Lys	Ala	Pro	Arg	Arg	Arg	Ala	Ala	
		180					185						190			
Ser	Met	Asp	Ser	Ser	Ser	Lys	Leu	Leu	Arg	Gly	Arg	Ser	Lys	Ala	Pro	
		195				200						205				
Lys	Lys	Lys	Pro	Ser	Val	Leu	Pro	Ala	Pro	Pro	Glu	Gly	Ala	Thr	Pro	
	210				215						220					
Thr	Ser	Pro	Val	Gly	His	Phe	Ala	Lys	Trp	Ser	Gly	Ser	Pro	Cys	Ser	
225					230					235					240	
Arg	Asn	Arg	Glu	Glu	Ala	Asp	Met	Trp	Thr	Thr	Phe	Arg	Pro	Arg	Ser	
			245					250						255		
Ser	Ser	Asn	Ala	Ser	Ser	Val	Ser	Thr	Arg	Leu	Ser	Pro	Leu	Arg	Pro	
		260					265						270			
Glu	Ser	Glu	Val	Leu	Ala	Glu	Glu	Ile	Pro	Ala	Ser	Val	Ser	Ser	Tyr	
		275				280					285					
Ala	Gly	Gly	Val	Pro	Pro	Thr	Leu	Asn	Glu	Gly	Leu	Glu	Leu	Leu	Asp	
	290					295					300					
Gly	Leu	Asn	Leu	Thr	Ser	His	Ser	Leu	Leu	Ser	Arg	Ser	Gly	Leu		
305				310					315					320		
Ser	Gly	Phe	Ser	Leu	Gln	His	Pro	Gly	Val	Thr	Gly	Pro	Leu	His	Thr	
			325					330						335		
Tyr	Ser	Ser	Ser	Leu	Phe	Ser	Pro	Ala	Glu	Gly	Pro	Leu	Ser	Ala	Gly	
		340					345						350			
Glu	Gly	Cys	Phe	Ser	Ser	Ser	Gln	Ala	Leu	Glu	Ala	Leu	Leu	Thr	Ser	
		355					360					365				

Asp	Thr	Pro	Pro	Pro	Pro	Ala	Asp	Val	Leu	Met	Thr	Gln	Val	Asp	Pro
370						375					380				
Ile	Leu	Ser	Gln	Ala	Pro	Thr	Leu	Leu	Leu	Leu	Gly	Gly	Leu	Pro	Ser
385					390					395					400
Ser	Ser	Lys	Leu	Ala	Thr	Gly	Val	Gly	Leu	Cys	Pro	Lys	Pro	Leu	Glu
				405					410					415	
Ala	Arg	Gly	Pro	Ser	Ser	Leu	Val	Pro	Thr	Leu	Ser	Met	Ile	Ala	Pro
			420					425					430		
Pro	Pro	Val	Met	Ala	Ser	Ala	Pro	Ile	Pro	Lys	Ala	Leu	Gly	Thr	Pro
		435					440					445			
Val	Leu	Thr	Pro	Pro	Thr	Glu	Ala	Ala	Ser	Gln	Asp	Arg	Met	Pro	Gln
450						455					460				
Asp	Leu	Asp	Leu	Asp	Met	Tyr	Met	Glu	Asn	Leu	Glu	Cys	Asp	Met	Asp
465					470					475					480
Asn	Ile	Ile	Ser	Asp	Leu	Met	Asp	Glu	Gly	Glu	Gly	Leu	Asp	Phe	Asn
				485					490					495	
Phe	Glu	Pro	Asp	Pro											
			500												